BOSS GNU/Linux User Manual

Version 5.0

Table of Contents

1. Introduction....7
  1.1 What is BOSS GNU/Linux?....7
    1.1.1 INSTALL 7
    1.1.2 BOSS Live....8
    1.1.3 UTILITY 8
    1.1.4 BOSS GNU/Linux Components....8
  1.2 BOSS GNU/Linux Licensing....9
    1.2.1 The BOSS Free & Open Source Software Guidelines 10
2.Installation Steps....12
  2.1 Before You Begin....12
    2.1.1 System Requirements....12
    2.1.2 Overview of the Installation Process....12
    2.1.3 Back Up Your Existing Data!....14
  2.2 Beginning the Installation....14
  2.3 Language Selection....15
  2.4 Country Selection 16
  2.5 Keyboard Configuration....17
  2.6 Network Configuration....17
  2.7 Disk Partitioning Setup....20
  2.8 Installing the Base System....51
  2.9 Set the Root Password....51
  2.10 Create User Account 53
  2.11 Software Selection....55
  2.12 Samba Server....56
3.GNOME Desktop....57
  3.1 Logging In and Selecting a Desktop....57
    3.1.1 Locking Your Screen....57
  3.2 Logging Out....57
  3.3 Desktop Components....58
    3.3.1 Desktop Icons....58
    3.3.2 Panel....59
  3.4 Handling Removable Media....60
    3.4.1 Removing Media Safely....60
  3.5 Managing Trash 61
  3.6 Managing Folders and Files with Nautilus....61
    3.6.1 File Manager Functionality....62
    3.6.2 File Manager Presentation....62
    3.6.3 File Browser Window Components....63
    3.6.4 Searching For Files....65
    3.6.5 Using Views to Display Your Files and Folders....67
    3.6.6 Moving a File or Folder....67
    3.6.7 Copying a File or Folder....67

3.6.8 Duplicating a File or Folder....68
3.6.9 Creating a Folder....68
3.6.10 Renaming a File or Folder....69
3.6.11 Moving a File or Folder to Trash....69
3.6.12 Deleting a File or Folder....69
3.6.13 Creating a Symbolic Link to a File or Folder....70
3.6.14 File Permissions....70
3.6.15 Changing Permissions....71
3.6.16 Writing CDs or DVDs....72
3.6.17 Accessing a Remote Server....73
3.7 Finding Data on your Computer....74
3.7.1 To Perform a Basic Search....74
3.7.2 To Add Search Options....75
3.7.3 To Stop a Search....75
3.7.4 To Open a Displayed File....75
3.7.5 To Delete a Displayed File....75
3.7.6 To Save the Search Results....76
4.Customizing Desktop Settings....77
4.1 Changing Individual Desktop Elements....77
4.1.1 Creating New Desktop Objects....77
4.1.2 Changing Panel Elements....77
4.2 Changing the Desktop Settings....78
4.2.1 Changing the Desktop Background....78
4.2.2 Changing the Desktop Font....78
4.2.3 Changing the Desktop Theme....79
4.2.4 Changing the Screen Saver....80
4.3 gDesklets....80
5.Linux Basics with BOSS GNU/Linux....82
5.1 Opening a Shell Prompt....82
5.2 Create a New User....83
5.3 Documentation for Linux Commands....84
6.Networking....85
6.1 Networking through Ethernet....85
6.2 Setting up Broadband Internet connection in BOSS....86
6.3 Wireless Connection....89
7.Hardware Configurations....91
7.1 Printers....91
7.2 Scanner Usage....94
7.3 USB....95
7.4 Webcam, Digital Camera....95
7.5 Bluetooth Support....95
8. LibreOffice....99
8.1 The LibreOffice Components....100
8.2 Word Processing with Writer....100

8.3 Using Spreadsheets with Calc....102
8.4 Using Presentations with Impress....104
8.5 Using Databases with Base....106
9.SCIM & OnScreen Keyboard....110
9.1 SCIM....110
9.2 OnScreen Keyboard....113
10.Internet....116
10.1 Browsing with Iceweasel....116
10.1.1 Tabbed Browsing....116
10.1.2 Using the Sidebar....117
10.1.3 Finding Information....117
10.1.3.1 Finding Information on the Web....117
10.1.3.2 Searching in the Current Page....117
10.1.4 Managing Bookmarks....118
10.1.4.1 Using the Bookmark Manager....118
10.1.4.2 Importing Bookmarks from Other Browsers....118
10.1.4.3 Live Bookmarks....118
10.1.5 Using the Download Manager....119
10.1.6 Adding Smart Keywords to Your Online Searches....119
10.1.7 Printing from Iceweasel....120
10.2 Mail Client....120
10.2.1 Icedove....120
10.3 Pidgin Internet Messenger....125
10.4 XChat IRC....128
10.5 Dictionary....130
10.6 Remmina Remote Desktop Client....133
10.7 Ekiga Sofphone....135
10.7.1 Ekiga account creation....135
10.8 Liferea- Desktop News Aggregator....136
10.8.1 Subscribe Feed....137
10.8.2 Searching Feed Content....138
Searching for Feed Content....138
Permanent Searches with Search Folders....138
10.9 Transmission Bit Torrent Client....139
10.10 Firestarter....140
11.Graphics....143
11.1 Document Viewer....143
11.2 F-Spot Photo Manager....145
11.2.1 Organizing your photos....145
11.2.2 Enjoying your photos....149
11.2.3 Sharing your photos....149
11.3 Image Viewer....150
11.3.1 Viewing Images....150
11.3.2 Manipulating Images....151

11.3.3 Viewing the Image Properties....151
11.3.4 Printing Images....151
11.3.5 Slide Show....152
12.Organize your Calendar, Timetable and Booklets....153
12.1 The Calendar....153
12.2 The To-do list....154
12.3 The Timetable....156
12.4 The Booklet....157
12.5 Printing....158
12.6 The Settings dialog....158
12.7 Saving between storing modes....163
13.Special Purpose Tools....164
13.1 Migration Tool....164
13.2 BOSS Presentation Tool....167
14.Playing Music and Movies....175
14.1 Banshee Music Player....175
14.1.1 Importing Music....175
14.1.2 Podcasts....175
14.1.3 Playing Audio CDs....176
14.1.4 Importing/Ripping Audio CDs....176
14.2 Movie Player....177
14.2.1 Opening a File....178
14.2.2 Opening a Location....179
14.2.3 Play a Movie (DVD or CD)....179
14.2.4 Eject a DVD or CD....179
14.2.5 Pause a Movie or Song....179
14.2.6 View Properties of a Movie or Song....179
14.2.7 Adjusting the Volume....180
14.2.8 Make Window Always On Top....180
14.2.9 Repeat Mode....180
14.2.10 Shuffle Mode....180
14.2.11 PlayList....180
14.3 Sound Recorder....181
14.3.1 Recording....181
14.3.2 Playing a Sound File....182
14.4 Restricted Formats....182
14.5 Audio CD Extractor....183
14.5.1 Entering Track Data....183
14.5.2 Extracting and Playing....184
14.6 Cheese Webcam Booth....185
14.7 Video Streaming....188
15.BOSS Security....192
15.1 Enabling Security Features....195
15.2 Disabling Security Features....208

15.3 Customized Security Features....214
16.Burning CDs and DVDs....217
16.1 Creating a Data CD or DVD....217
16.2 Creating an Audio CD....218
16.3 Copying a Data or Audio CD or DVD....219
16.4 Blank a CD-RW....219
16.5 Burn an ISO Image....220
17.Partition Editor....221
18.Changing the name of Applications in BOSS....223
18.1 Changing the name of main menu....223
18.2 Changing the name of sub menu....224
19.How to install ANYTHING in BOSS !!....226
19.1 Synaptic Package Manager....226
19.2 Where is my Binary File ?....229
20.About BOSS Live....230
21.About Utility....231
22.Troubleshooting BOSS GNU/Linux....233
22.1 Forgotten User Password....233
22.2 Error Messages during installation of deb packages....233
22.3 Font Installation....234
22.4 Grub Recovery....234
23.Conclusion....236
23.1 About CDAC....236
23.2 About NRCFOSS....236
23.3 Contact Us....237
23.4 BOSS Support Centres....237

1. Introduction

We are delighted that you have decided to try BOSS GNU/Linux, and are sure that you will find that BOSS GNU/Linux distribution is unique. BOSS GNU/Linux brings together high-quality free software from around the world, integrating it into a coherent whole. We believe that you will find that the result is truly more than the sum of the parts. We understand that many of you want to install BOSS GNU/Linux without reading this manual, and the Debian Installer is designed to make this possible.

1.1 What is BOSS GNU/Linux?

BOSS comes with a set of features which are needed for daily usage of a common desktop and in government organizations. BOSS is a GNU/Linux distribution, developed by C-DAC, to provide a complete usable Operating System consisting of GUIs and console applications for routine tasks and additional utilities for a desktop.

BOSS DVD pack consists of 3 sections. The Install section which gives you a BOSS Desktop in your system, a Live section which allows you to try BOSS without installing on the Hard Disk and without disturbing your existing OS and the Utility section which has some of the extra packages like OpenOffice Indian language packs, Apache web server, scripting languages etc. You can get more details about BOSS DVDs and their functionality in our website http://www.bosslinux.in

1.1.1 INSTALL

To install BOSS , you need to have a minimum of 5.0 GB of hard disk space, 512 MB of RAM and a DVD-ROM drive. Insert the BOSS GNU/Linux DVD into the drive, restart your computer and boot from DVD by editing the BIOS setup. The BOSS screen appears with three options:

1) Start BOSS Live
2) Install BOSS-Graphical
3) Install BOSS-Text Mode

To use BOSS Live select the *"Start BOSS Live" option.*

You can proceed with the default installation by clicking *"Install BOSS-Graphical"* or *"Install BOSS-Text Mode"*. The details about the installation options and screen shots can also be found at BOSS GNU/Linux website http://www.bosslinux.in.

1.1.2 BOSS Live

BOSS Live is a GNU/Linux distribution that boots and runs completely from DVD. It includes recent linux software and desktop environments, with programs such as OpenOffice.org, GIMP, Iceweasel, Pidgin, Totem and hundreds of other quality open source programs. It also includes document converter, Presentation tool, bluetooth device support and Input method for Indian Languages.

> *Using Live option you can test BOSS before installing it on your harddisk.*
> *Later Proceed with Installation*

1.1.3 UTILITY

The DVD consists of workstation related packages, like Apache webserver, egroupware collaboration tool, Openoffice Indian language pack and some other language fonts etc., You can find out the usage of the Utility below. This BOSS Utility disc or Addon disc contains the packages related to workstation.

Usage of Utility:

1. Insert the DVD ,make sure it mounts properly.
2. Click “BOSS Utilities” menu item from **System -> Administration** menu.
3. Continue with instructions provided.
4. Go through the README file available in DVD.

1.1.4 BOSS GNU/Linux Components

1.Kernel – 3.2.0

2.Iceweasel Web Browser

3.Pidgin Internet Messenger

4.Gwibber Instant-Messanger

5.Evolution Mail Client

6.BharateeyaOO

7.BOSS Security Tool

8.BOSS Presentation Tool

9.Bulk Document Converter

10.Totem Movie Player

11.Banshee Music Player

12.gThumb Image viewer

13. Shotwell - Personal photo management application

14. XSane Image scanning program

15. K3b

16.SCIM – Smart Common Input Method

17.GNOME Contacts

18.Document Viewer

19.Partition Editor

20.XChat – Internet Relay Chat

21.Synaptic Package Manager

22.XBMC Media Center

23.Remmina Remote Desktop Client

24.Transmission BitTorrent Client

25.Anjuta IDE

26.Wireless Driver Installer

27.Cheese Webcam booth

1.2 BOSS GNU/Linux Licensing

BOSS GNU/Linux is a collection of many computer programs and documents created by BOSS Team. Each of these works might come under a different license. Our License Policy describe the process that we follow in determining which software we will ship by default on the BOSS Install, Live and Utility.

The BOSS team is committed to Free and Open Source Software. The world is a better place if you have the source code to all the software on your computer, and the right to use that source code in constructive ways.

We would invite you to read more about our Free Software Philosophy and help to shape this

policy further.

Categories of software in BOSS GNU/Linux

We organize the thousands of software packages available for BOSS GNU/Linux into three key components: main, contrib, non-free. Software is published in one of those components based on whether or not it meets our Free Software Philosophy, and the level of support we can provide for it. This policy really addresses the software that you will find in main and non-free. Those components contain software that is fully supported by the BOSS team and must comply with this policy.

All software in BOSS main and non-free must be licensed in a way that is compatible with our license policy. There are many definitions of "free" and free software so we have included our own set of guidelines, listed below.

BOSS GNU/Linux "main" Component License Policy

All application software included in the BOSS GNU/Linux main component:

Must include source code. The main component has a strict and non-negotiable requirement that application software included in it must come with full source code.

Must allow modification and distribution of modified copies under the same license. Just having the source code does not convey the same freedom as having the right to change it. Without the ability to modify software, the BOSS community cannot support software, fix bugs, translate it or improve it.

1.2.1 The BOSS Free & Open Source Software Guidelines

1.Free Redistribution

The license of a BOSS GNU/Linux component may not restrict any party from selling or giving away the software as a component of an aggregate software distribution containing programs from several different sources. The license may not require a royalty or other fee for such sale.

2.Source Code

The program must include source code, and must allow distribution in source code as well as compiled form.

3.Derived Works

The license must allow modifications and derived works, and must allow them to be distributed under the same terms as the license of the original software.

4.Integrity of The Author's Source Code

The license may restrict source-code from being distributed in modified form _only_ if the

license allows the distribution of "patch files" with the source code for the purpose of modifying the program at build time. The license must explicitly permit distribution of software built from modified source code. The license may require derived works to carry a different name or version number from the original software. (This is a compromise. The BOSS group encourages all authors not to restrict any files, source or binary, from being modified.)

5.No Discrimination Against Persons or Groups

The license must not discriminate against any person or group of persons.

6.No Discrimination Against Fields of Endeavor

The license must not restrict anyone from making use of the program in a specific field of endeavor. For example, it may not restrict the program from being used in a business, or from being used for genetic research.

7.Distribution of License

The rights attached to the program must apply to all to whom the program is redistributed without the need for execution of an additional license by those parties.

8.License Must Not Be Specific to BOSS GNU/Linux

The rights attached to the program must not depend on the program's being part of a BOSS GNU/Linux system. If the program is extracted from BOSS GNU/Linux and used or distributed without BOSS GNU/Linux but otherwise within the terms of the program's license, all parties to whom the program is redistributed should have the same rights as those that are granted in conjunction with the BOSS system.

9.License Must Not Contaminate Other Software

The license must not place restrictions on other software that is distributed along with the licensed software. For example, the license must not insist that all other programs distributed on the same medium must be free software.

10.Example Licenses

The "GPL", "BSD", and "Artistic" licenses are examples of licenses that we consider "free".

2. Installation Steps

This manual helps you to install BOSS GNU/Linux on desktops and laptops. The installation system is flexible enough to use even if you have no previous knowledge of Linux or computer networks. If you select default options, BOSS GNU/Linux provides a complete desktop operating system, including productivity applications, Internet utilities, and desktop tools.

This document does not detail all of the features of the installation system. If you want the complete details of the features during installation please check our BOSS website at http://www.bosslinux.in

2.1 Before You Begin

2.1.1 System Requirements

BOSS GNU/Linux does not impose hardware requirements beyond the requirements of the Linux kernel and the GNU tool-sets. Therefore, any architecture or platform to which the Linux kernel, libc, gcc, etc. have been ported, can run BOSS GNU/Linux. To install BOSS GNU/Linux you need very minimum system configurations. The hardware requirement details are as follows:

- Hard Disk – 5.0 GB (unpartitioned space)
- RAM – 512 MB
- DVD-ROM drive

To install BOSS GNU/Linux from disc, you need the installation DVD, currently, BOSS GNU/Linux supports the *i386* and *x86_64* architectures. These architectures are described below:

i386

Intel x86-compatible processors, including Intel Pentium and Pentium-MMX, Pentium Pro, Pentium-II, Pentium-III, Celeron, Pentium 4, and Xeon; VIAC3/C3-m and Eden/Eden-N; and AMD Athlon, AthlonXP, Duron, AthlonMP, and Sempron

x86_64

64-bit AMD processors such as Athlon64, Turion64, Opteron; and Intel 64-bit processors such as EM64T

2.1.2 Overview of the Installation Process

First, just a note about re-installations. With BOSS GNU/Linux, a circumstance that will

require a complete re-installation of your system is very rare; perhaps mechanical failure of the hard disk would be the most common case. Many common operating systems may require a complete installation to be performed when critical failures take place or for upgrades to new OS versions. Even if a completely new installation isn't required, often the programs you use must be re-installed to operate properly in the new OS. Under BOSS GNU/Linux, it is much more likely that your OS can be repaired rather than replaced if things go wrong. Upgrades never require a wholesale installation; you can always upgrade in-place. And the programs are almost always compatible with successive OS releases. If a new program version requires newer supporting software, the BOSS packaging system ensures that all the necessary software is automatically identified and installed. The point is, much effort has been put into avoiding the need for re-installation, so think of it as your very last option. The installer is not designed to re-install over an existing system. Here's a road map for the steps you will take during the installation process.

4. Back up any existing data or documents on the hard disk where you plan to install.
5. Gather information about your computer and any needed documentation, before starting the installation.
6. Create partition-table space for BOSS on your hard disk.
4. Set up the first boot drive to DVD drive (through CMOS setup) and restart your system.
5. Insert the BOSS GNU/Linux DVD into the drive
6. Boot the installation system.
7. Select installation language.
8. Activate the ethernet network connection, if available.
9. Create and mount the partitions on which BOSS GNU/Linux will be installed.
10. Watch the automatic install/setup of the base system.
11. Installs additional software (tasks and/or packages), at your discretion.
12. Installs a boot loader which can start up BOSS GNU/Linux on your existing system.
13. Load the newly installed system for the first time, and make some initial system settings.
14. If you have problems during the installation, it helps to know which packages are involved in which steps.
15. Introducing the leading software actors in this installation drama: The installer software, debian-installer, is the primary concern of this manual. It detects hardware and loads appropriate drivers, uses dhcp-client to set up the network connection, and runs debootstrap to install the base system packages. Many more actors play smaller parts in this process, but debian-installer has completed its task when you load the new system for the first time. Upon loading the new base system, base-config supervises

adding users, setting a time zone (via tzsetup), and setting up the package installation system (using apt-setup). It then launches tasksel which can be used to select large groups of related programs, and in turn can run aptitude which allows you to choose individual software packages.

2.1.3 Back Up Your Existing Data!

Before you start, make sure to back up every file that is now on your system. If this is the first time a non-native operating system has been installed on your computer, it's quite likely you will need to re-partition your disk to make room for BOSS GNU/Linux. Anytime you partition your disk, you should count on losing everything on the disk, no matter what program you use to do it. The programs used in installation are quite reliable and most have seen years of use; but they are also quite powerful and a false move can cost you.

Even after backing up be careful and think about your answers and actions. Two minutes of thinking can save hours of unnecessary work. If you are creating a multi-boot system, make sure that you have the distribution media of any other present operating systems on hand. Especially if you repartition your boot drive, you might find that you have to reinstall your operating system's boot loader, or in many cases the whole operating system itself and all files on the affected partitions.

2.2 Beginning the Installation

To begin installation of BOSS GNU/Linux, boot the computer from the boot media i.e from CD or DVD or any other storage bootable media like USB .

The *BIOS* (Basic Input/Output System) on your computer must support the type of boot media you select. The BIOS controls access to some hardware devices during boot time. Any computer that meets the minimum recommended specification for BOSS GNU/Linux can boot from a CD or DVD drive with the first disc.

If you are not sure what capabilities your computer has, or how to configure the BIOS, consult the documentation provided by the manufacturer. Detailed information on hardware specifications and configuration is beyond the scope of this document.

Aborting the Installation

To abort the installation process at any time before the **Installing Packages** screen, either press *Ctrl+Alt+Del* or power off the computer with the power switch. BOSS GNU/Linux makes no changes to your computer until package installation begins. Booting from Disc

To boot your computer from disc:

1. Switch on the computer.
2. Insert the disc into the DVD drive.

3. A screen appears to ask for a booting option.,
   1) *Start BOSS Live*
   2) *Install BOSS-Graphical*
   3) *Install BOSS-Text Mode*
   4) *Advance options*
   5) *Help*
1. Booting through “Start BOSS Live” will take you a tour around BOSS virtually. Using this Live Boot you can check out the BOSS desktop and its applications and once you are satisfied with BOSS., you can come back and choose for “Install BOSS-Graphical” or “Install BOSS-Text Mode”.

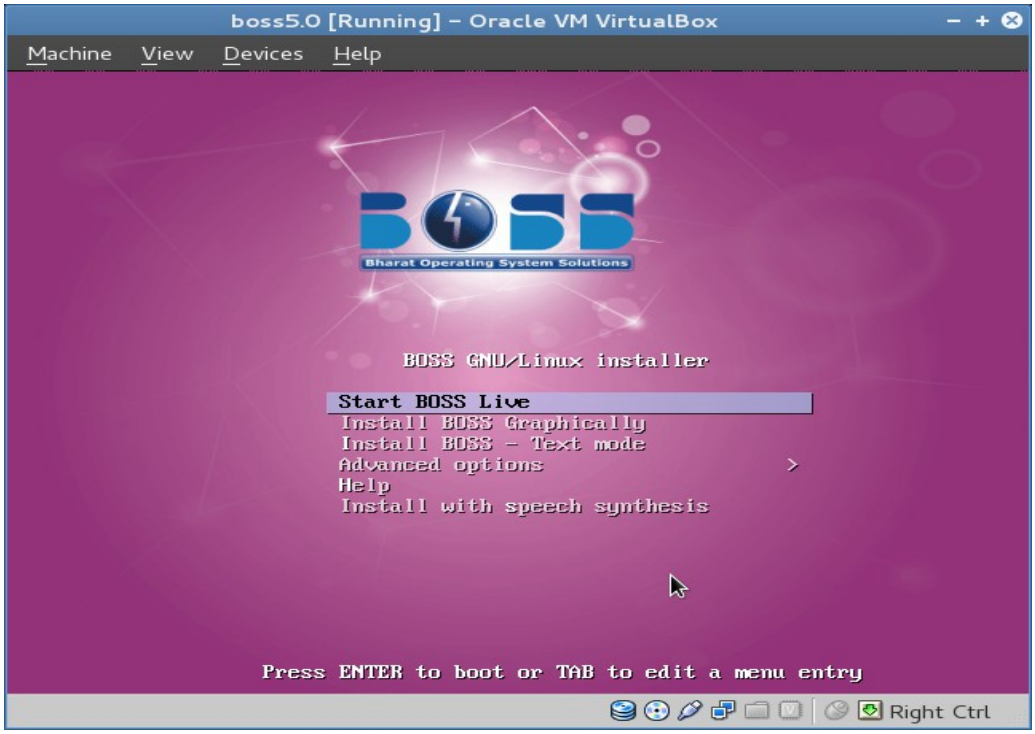

boss5.0 [Running] – Oracle VM VirtualBox
Machine View Devices Help
Bharat Operating System Solutions
BOSS GNU/Linux installer
Start BOSS Live
Install BOSS Graphically
Install BOSS - Text mode
Advanced options
Help
Install with speech synthesis
Press ENTER to boot or TAB to edit a menu entry
Right Ctrl

Figure 1. Boot Screen

2.3 Language Selection

The installation program displays a list of languages which are supported by BOSS GNU/Linux. Select the Language as “English” / “Tamil” / “Hindi” (or any other). Click “Continue” to proceed.

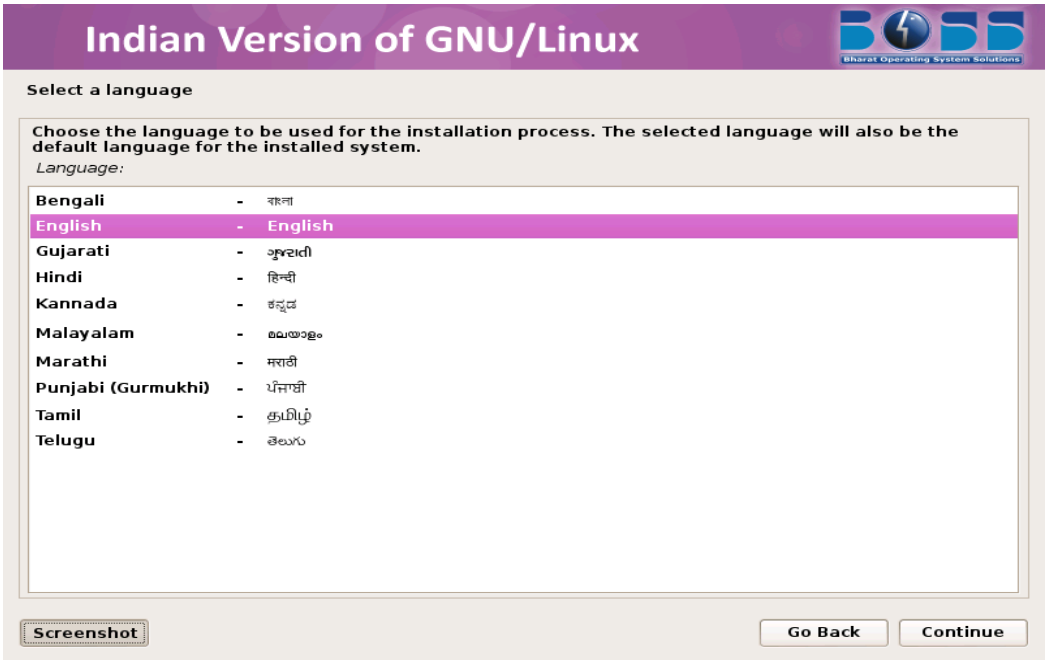


Figure 2. Language Selection Screen

2.4 Country Selection

Next the country selection screen appears. Select the appropriate country from the list. Click “Continue” and proceed further

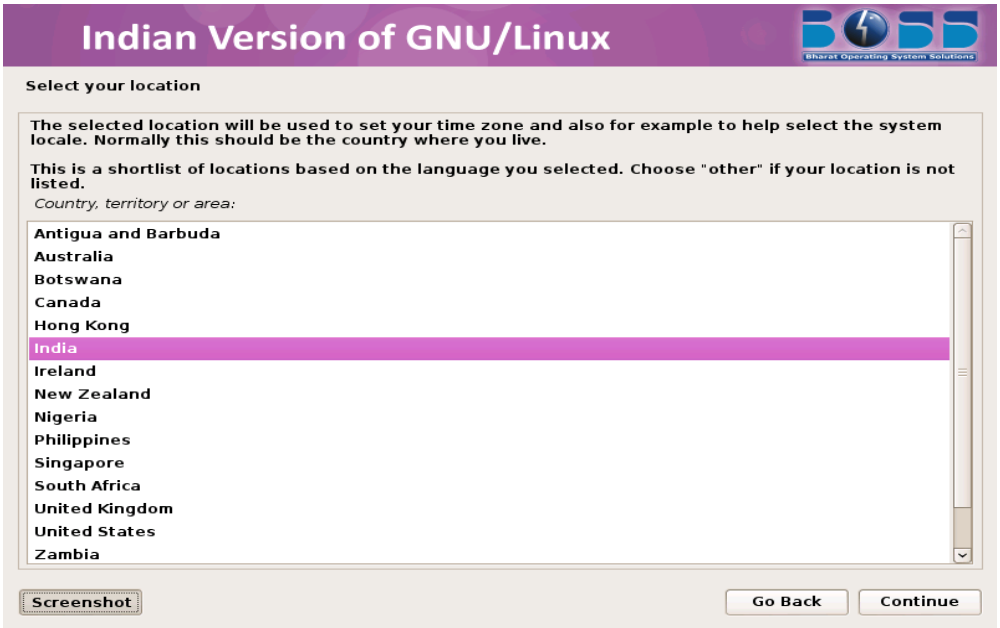


Figure 3. Country Selection Screen

2.5 Keyboard Configuration

The installation program displays a list of the keyboard layouts supported by BOSS GNU/Linux. Highlight the correct layout on the list, and select “Next”.

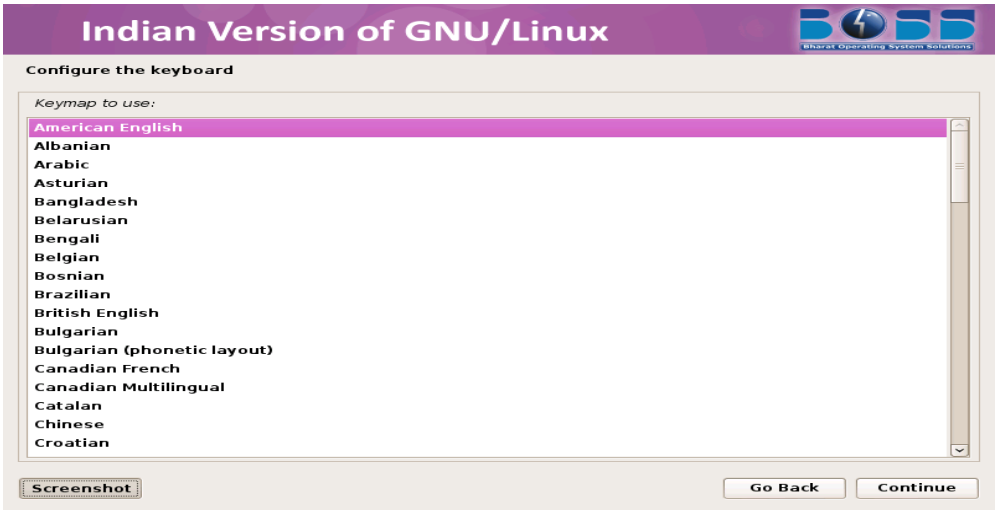


Figure 4. Keyboard Configuration Screen

2.6 Network Configuration

Configuring Network Automatically

If you have a DHCP Server, then the Network will be automatically configured. There is no need for the user to bother about the network configuration.

Configuring Network Manually

If that is not the case, you need to manually configure the network. When the DHCP server is not available, the following screen appears which means you need to configure manually.

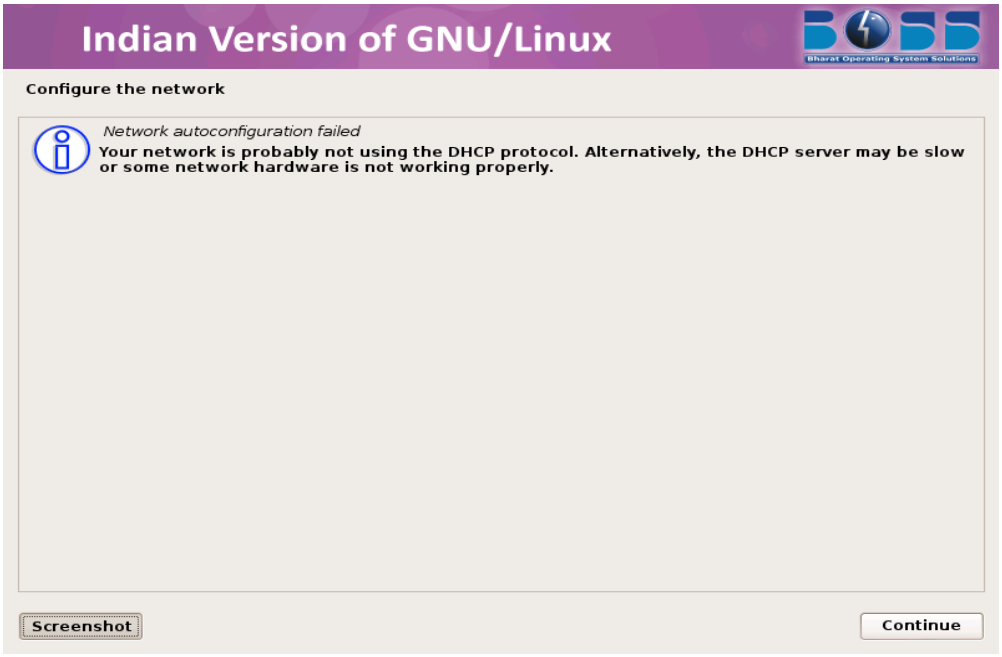

Indian Version of GNU/Linux
Configure the network
Network autoconfiguration failed
Your network is probably not using the DHCP protocol. Alternatively, the DHCP server may be slow or some network hardware is not working properly.
Screenshot
Continue

Figure 5.1 Network Configuration

Click on “Continue” to proceed towards Manual Network configuration.

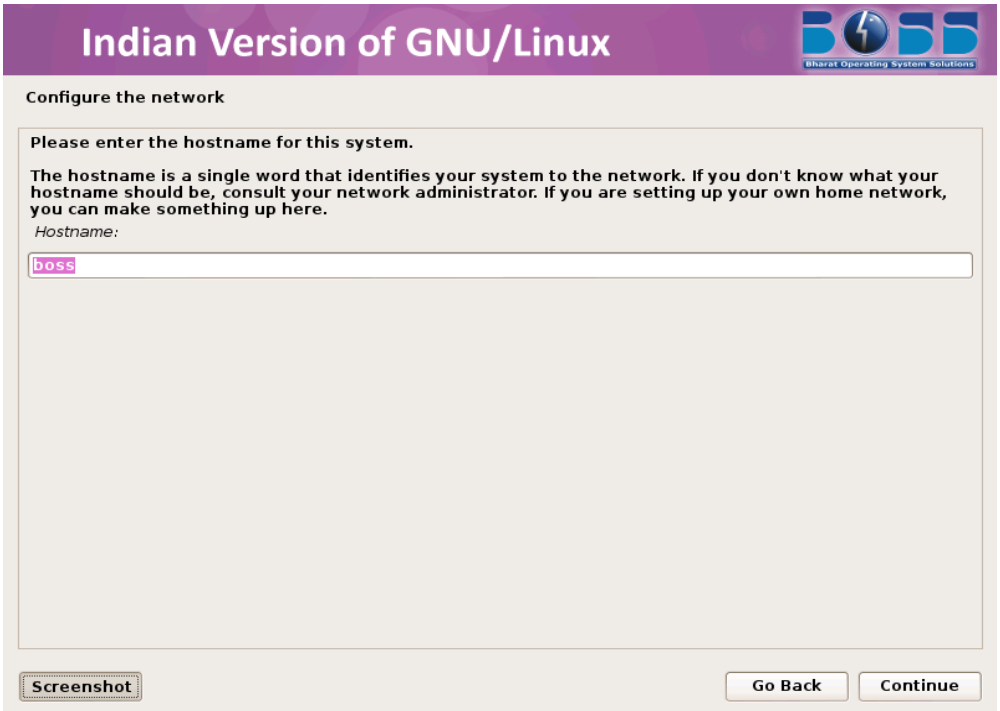

Indian Version of GNU/Linux
Configure the network
Please enter the hostname for this system.
The hostname is a single word that identifies your system to the network. If you don't know what your hostname should be, consult your network administrator. If you are setting up your own home network, you can make something up here.
Hostname:
boss
Screenshot
Go Back
Continue

Figure 5.2 Network Configuration

Select “Configure Network Manually” and set the IP address and configure network.

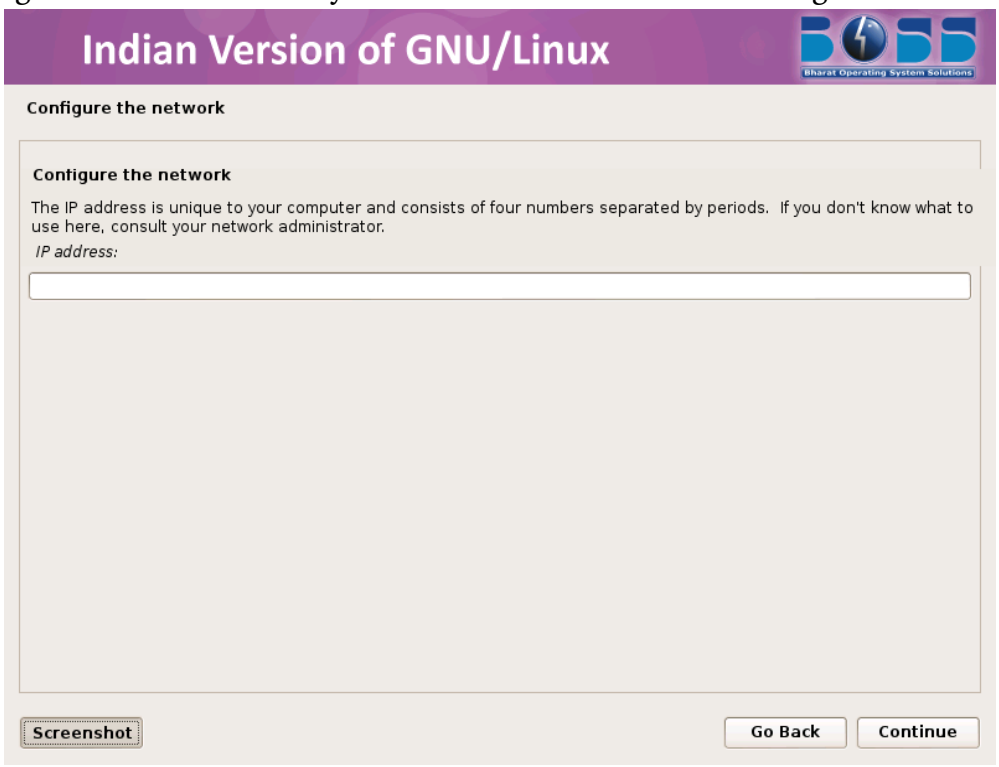

Indian Version of GNU/Linux
Configure the network
Configure the network
The IP address is unique to your computer and consists of four numbers separated by periods. If you don't know what to use here, consult your network administrator.
IP address:
Screenshot
Go Back
Continue

Figure 5.3 Network Configuration

The screen shots are as follows:

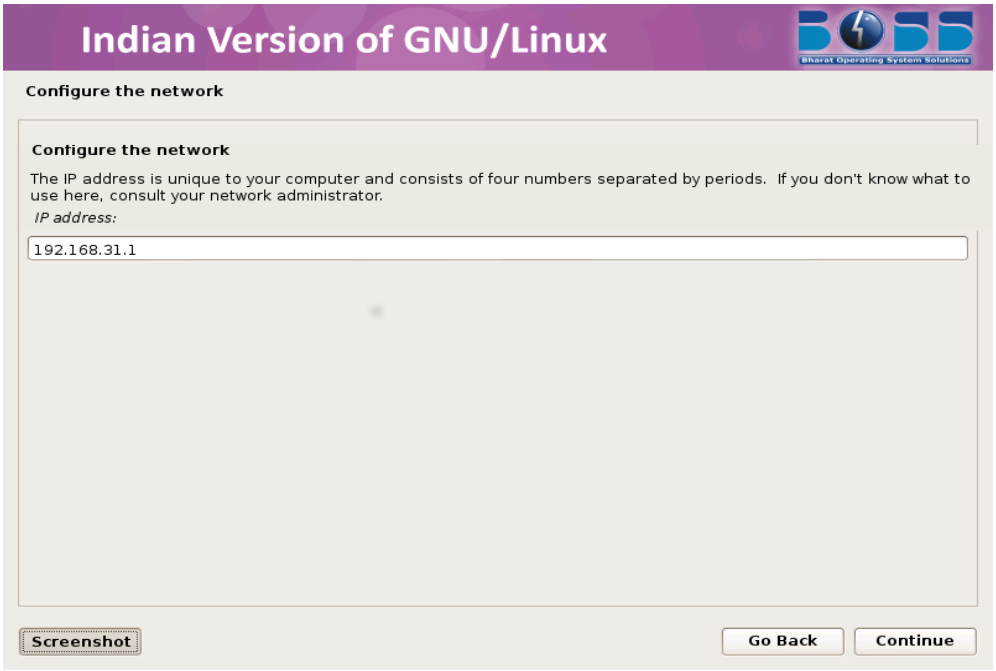

Indian Version of GNU/Linux
Configure the network
Configure the network
The IP address is unique to your computer and consists of four numbers separated by periods. If you don't know what to use here, consult your network administrator.
IP address:
192.168.31.1
Screenshot
Go Back
Continue

Figure 5.4 Network Configuration

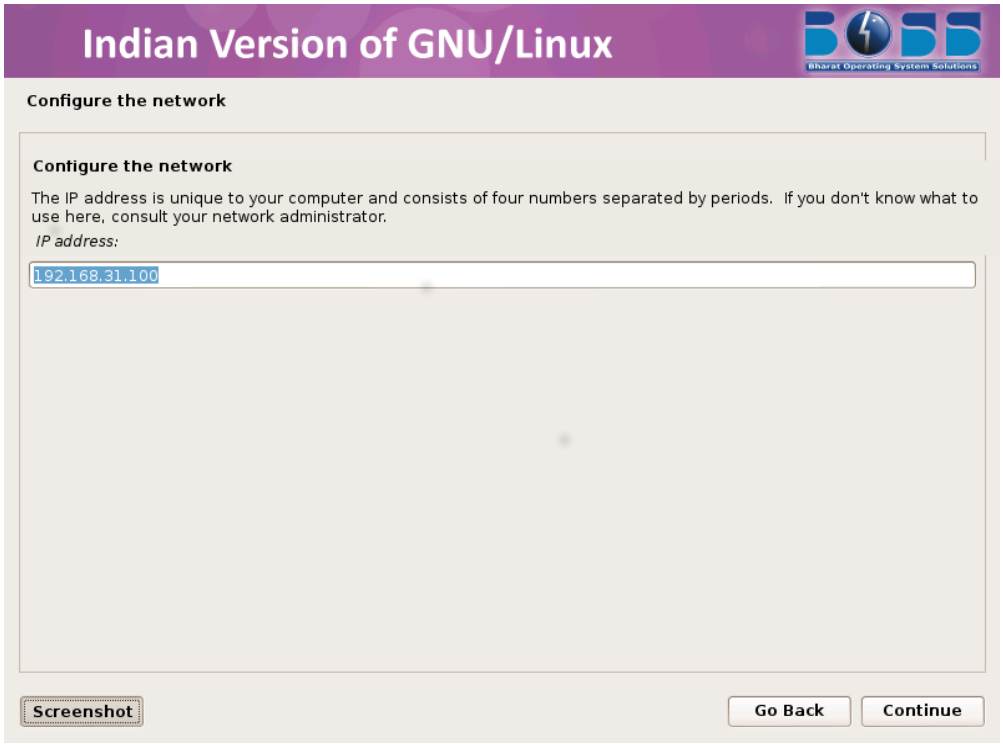

Indian Version of GNU/Linux
Configure the network
Configure the network
The IP address is unique to your computer and consists of four numbers separated by periods. If you don't know what to use here, consult your network administrator.
IP address:
192.168.31.100
Screenshot
Go Back
Continue

Figure 5.5 Network Configuration

The next screen will ask you to enter the hostname for the system.

2.7 Disk Partitioning Setup

If you are new to Linux, you may want to use the automatic partitioning method. If you are a more experienced Linux user, use the manual partitioning method for more control over your system configuration, or select and modify the automatically defined partitions.

The screen below shows the way you would like to partition. These are the following ways in which you can partition the hard disk

a) Automatic partitioning

b) LVM partitioning

c) Manual partitioning.

a) Automatic Partitioning

By selecting automatic partitioning, you will not have to use partitioning tools to assign mount points, create partitions or allocate space for your installation.

You will be provided with two options in automatic partition -

- Format entire Hard Disk

- Use Existing Hard disk Space

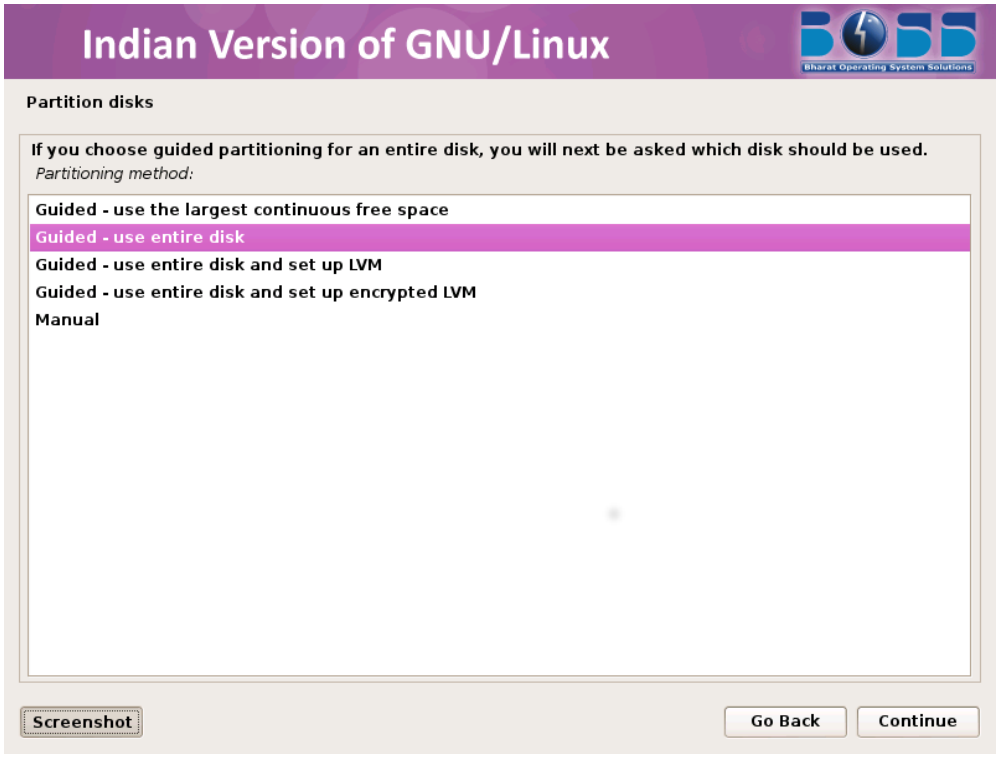

Indian Version of GNU/Linux
Partition disks
If you choose guided partitioning for an entire disk, you will next be asked which disk should be used.
Partitioning method:
Guided - use the largest continuous free space
Guided - use entire disk
Guided - use entire disk and set up LVM
Guided - use entire disk and set up encrypted LVM
Manual
Screenshot
Go Back
Continue

Figure 6.1 Format Entire Hard Disk

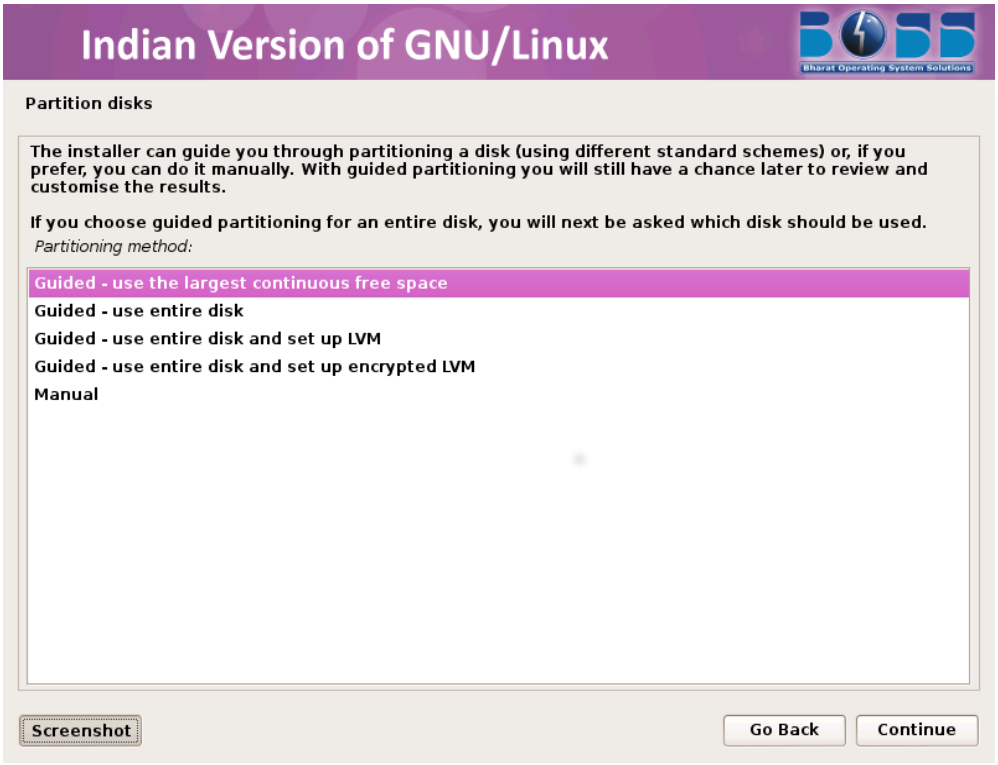

Indian Version of GNU/Linux
Partition disks
The installer can guide you through partitioning a disk (using different standard schemes) or, if you prefer, you can do it manually. With guided partitioning you will still have a chance later to review and customise the results.
If you choose guided partitioning for an entire disk, you will next be asked which disk should be used.
Partitioning method:
Guided - use the largest continuous free space
Guided - use entire disk
Guided - use entire disk and set up LVM
Guided - use entire disk and set up encrypted LVM
Manual
Screenshot
Go Back
Continue

Figure 6.2 Use the largest Free Space Available

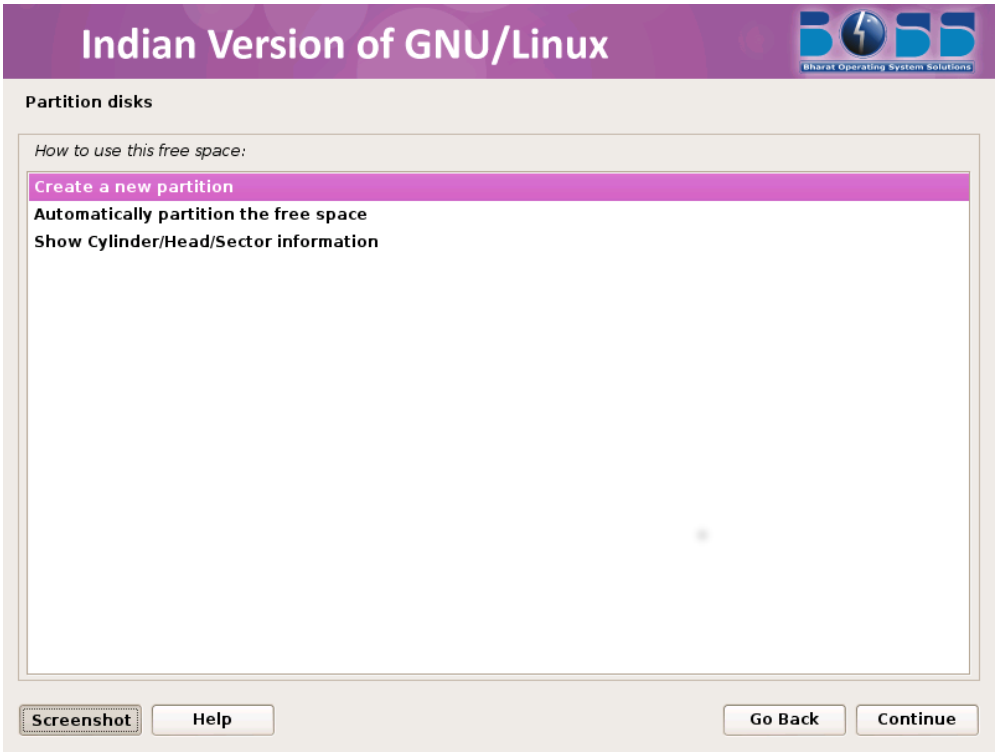


Figure 6.3 Allot the space for different directories

b) LVM partitioning

LVM is a tool for logical volume management which includes allocating disks, resizing logical volumes. The Logical Volume Manager (LVM) enables flexible distribution of hard disk space over several file systems. As it is difficult to modify partitions on a running system, LVM was developed. It provides a virtual pool (Volume Group — VG for short) of memory space from which logical volumes (LV) can be generated if needed. The operating system accesses these instead of the physical partitions.

The screen shots are as follows:

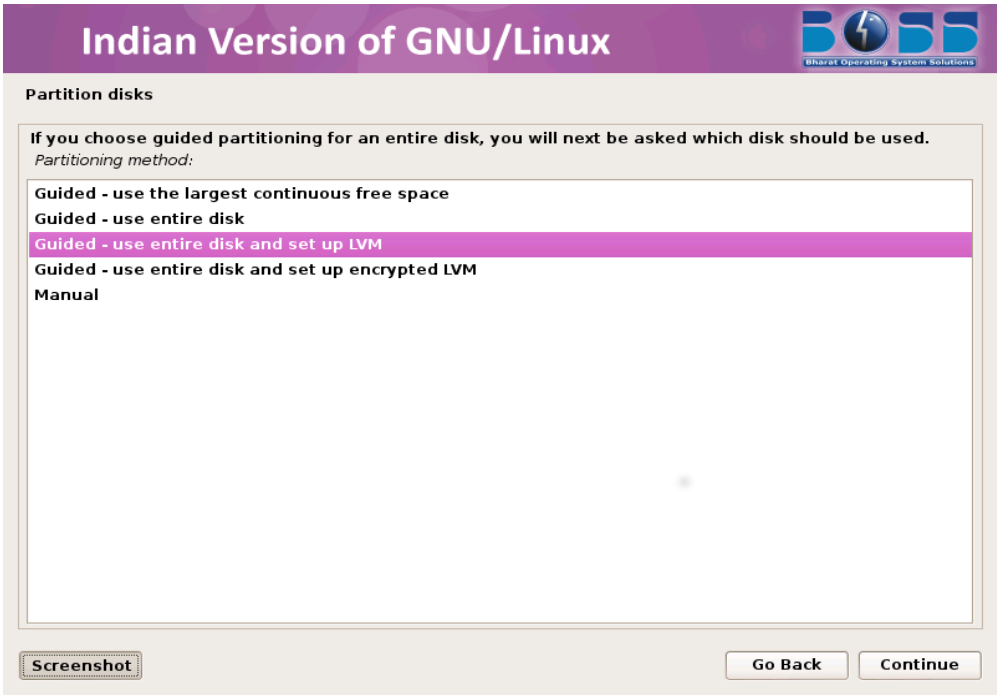

Indian Version of GNU/Linux
Partition disks
If you choose guided partitioning for an entire disk, you will next be asked which disk should be used.
Partitioning method:
Guided - use the largest continuous free space
Guided - use entire disk
Guided - use entire disk and set up LVM
Guided - use entire disk and set up encrypted LVM
Manual
Screenshot
Go Back
Continue

Figure 6.4 LVM Partitioning

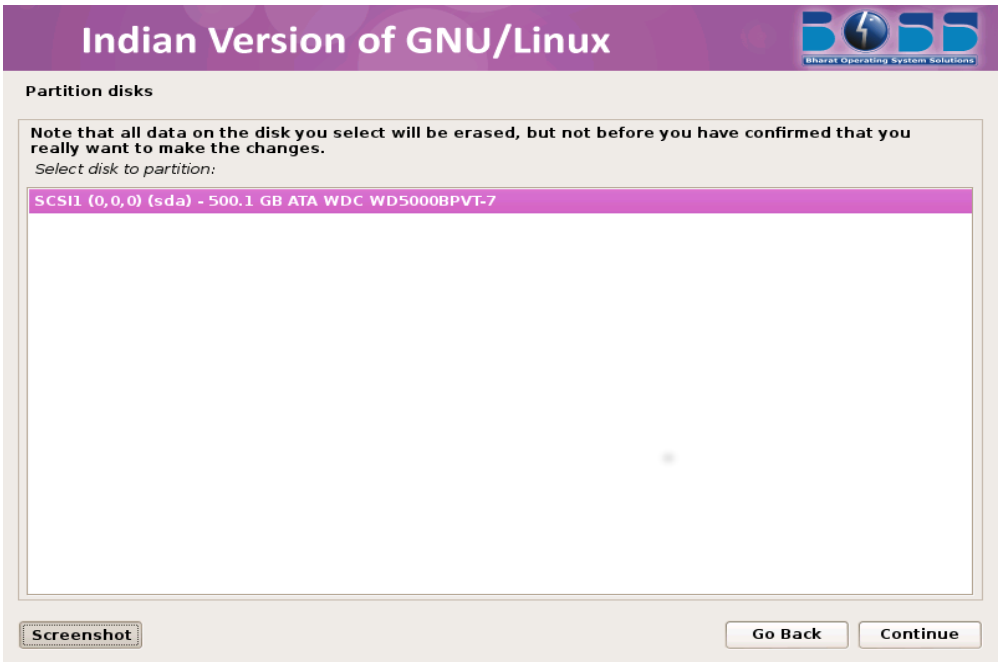

Indian Version of GNU/Linux
Partition disks
Note that all data on the disk you select will be erased, but not before you have confirmed that you really want to make the changes.
Select disk to partition:
SCSI1 (0,0,0) (sda) - 500.1 GB ATA WDC WD5000BPVT-7
Screenshot
Go Back
Continue

Figure 6.5 Select the disk to partition

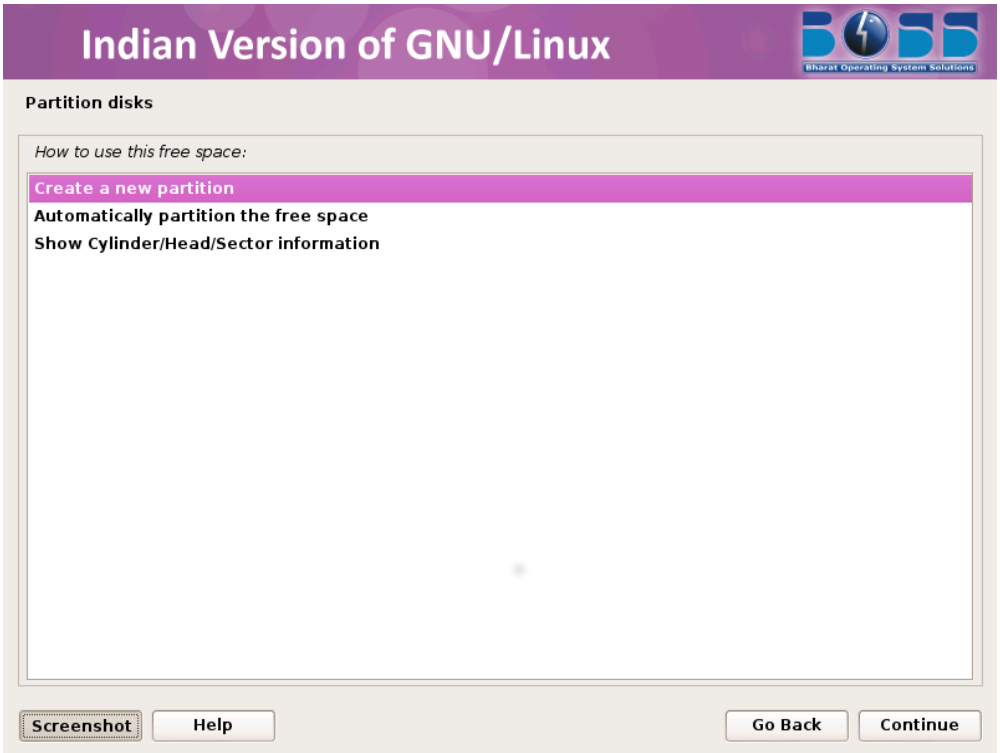


Figure 6.6 LVM Partitioning

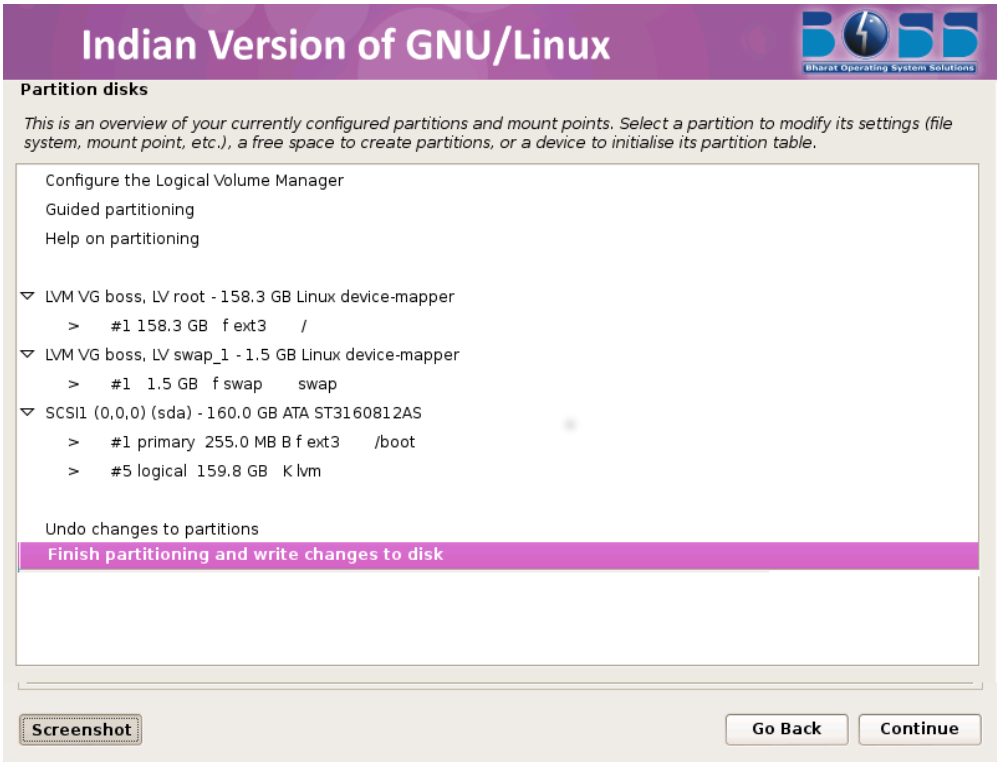

Indian Version of GNU/Linux
Partition disks
This is an overview of your currently configured partitions and mount points. Select a partition to modify its settings (file system, mount point, etc.), a free space to create partitions, or a device to initialise its partition table.
Configure the Logical Volume Manager
Guided partitioning
Help on partitioning
LVM VG boss, LV root - 158.3 GB Linux device-mapper
> #1 158.3 GB f ext3 /
LVM VG boss, LV swap_1 - 1.5 GB Linux device-mapper
> #1 1.5 GB f swap swap
SCSI1 (0,0,0) (sda) - 160.0 GB ATA ST3160812AS
> #1 primary 255.0 MB B f ext3 /boot
> #5 logical 159.8 GB K lvm
Undo changes to partitions
Finish partitioning and write changes to disk
Screenshot
Go Back
Continue

Figure 6.7 Finish Partitioning

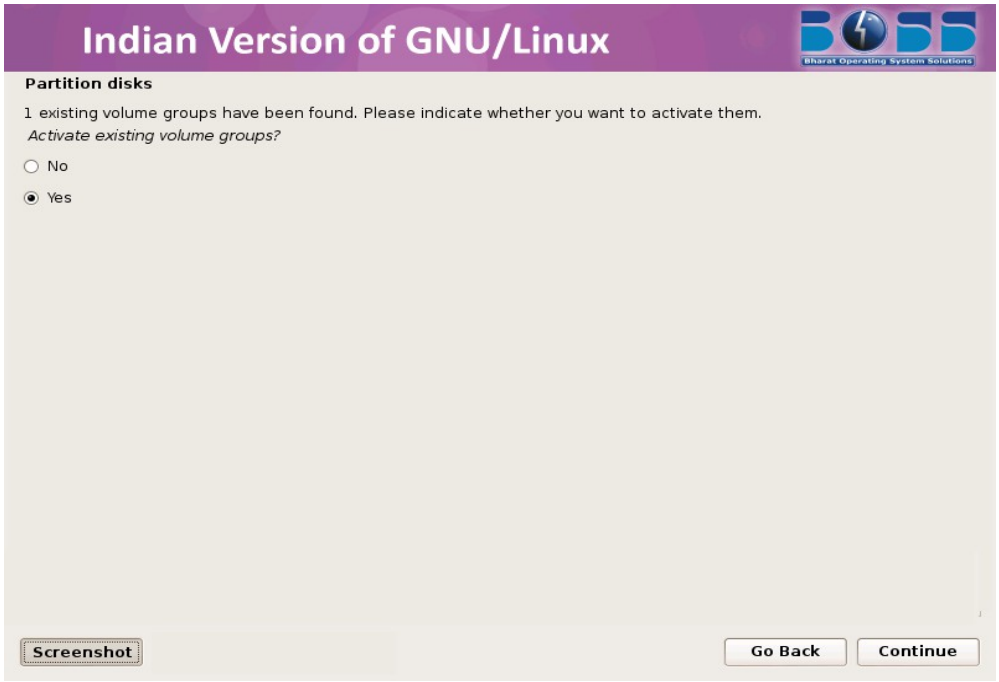


Figure 6.8 LVM Partitioning

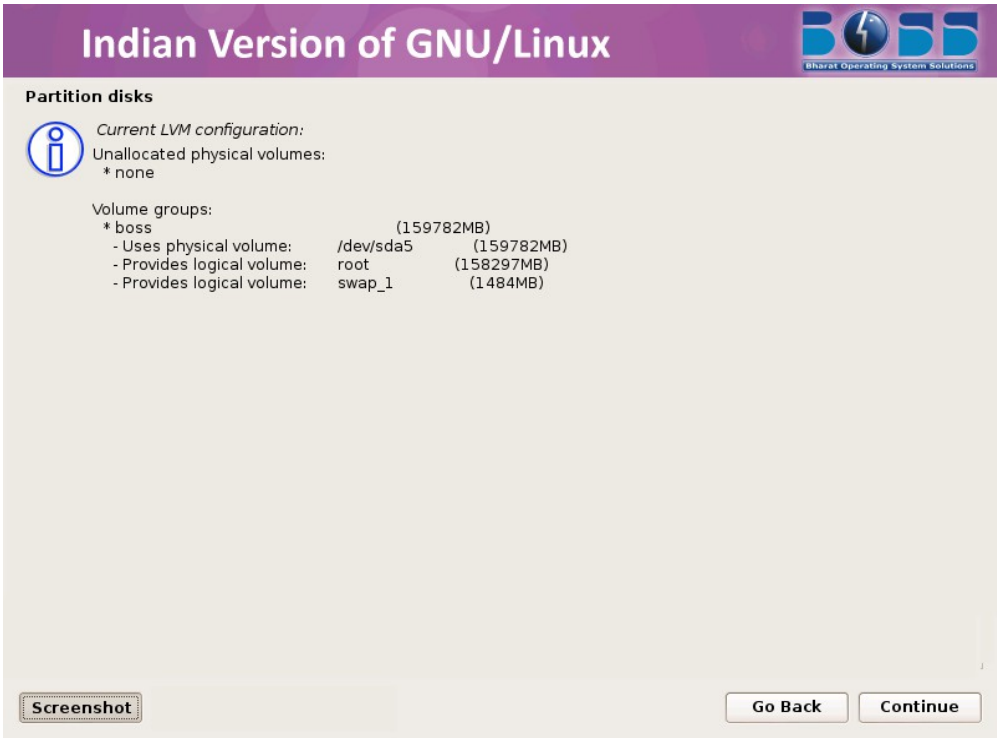


Figure 6.9 LVM Partitioning

Use Existing Hard disk Space

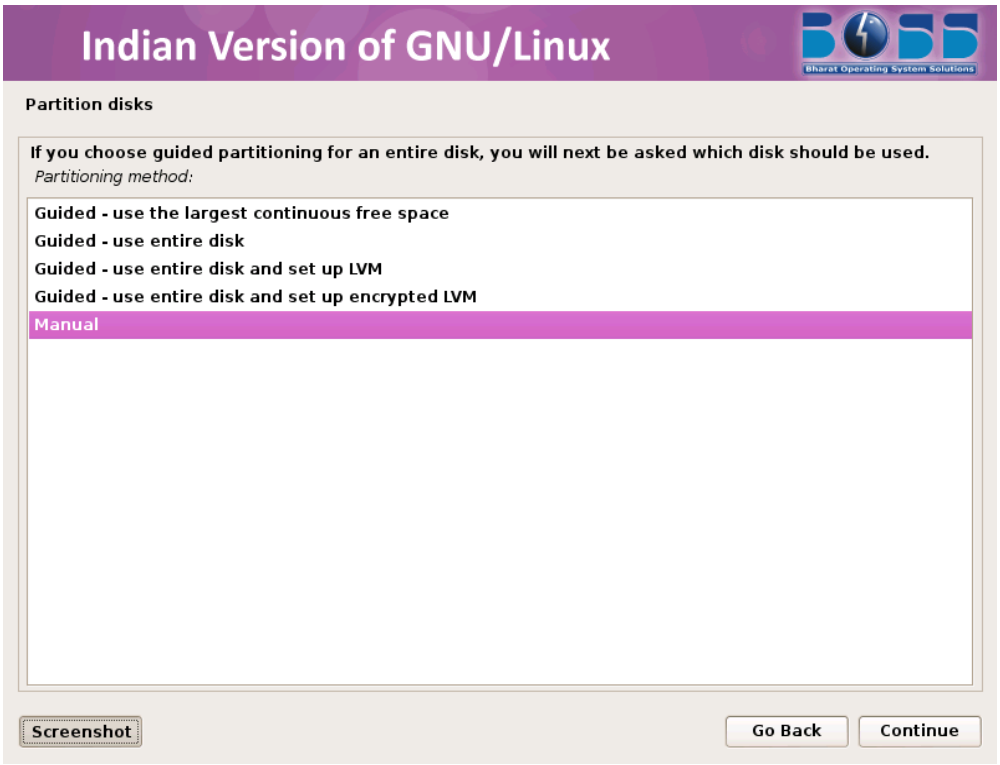
This means that you need to have an empty unpartitioned free space which is not used for any other OS like Windows or Linux. Once you select this option it will ask you for the partition space details and then format it, later the installation proceeds.

c) Manual Partitioning

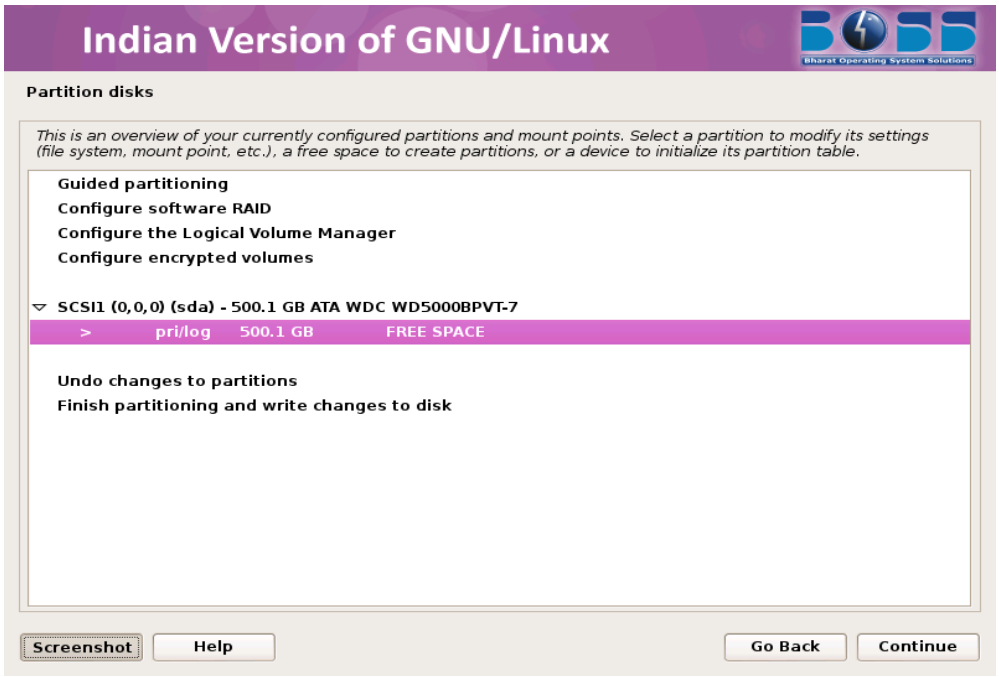
Creating a new partition

To partition manually , the following screen shots will help you setting up the partition.

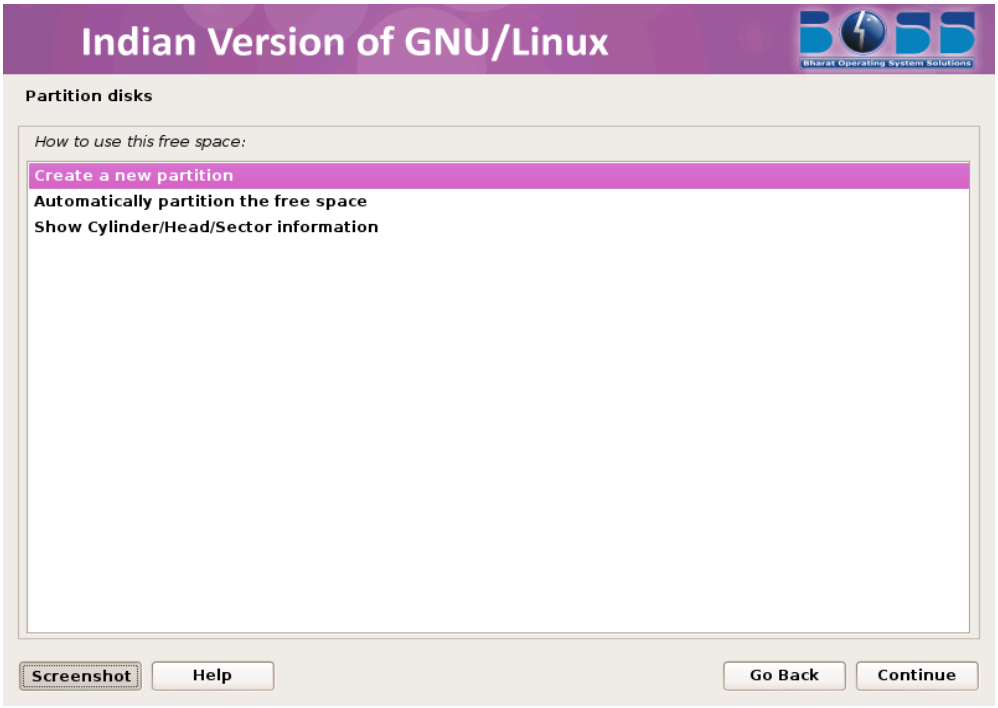
1. A screen with name “Partition disks” will be displayed. In that click “Manual” and then click “Continue.”


Indian Version of GNU/Linux
Partition disks
If you choose guided partitioning for an entire disk, you will next be asked which disk should be used.
Partitioning method:
Guided - use the largest continuous free space
Guided - use entire disk
Guided - use entire disk and set up LVM
Guided - use entire disk and set up encrypted LVM
Manual
Screenshot
Go Back
Continue

2. After clicking “Manual” a screen will be displayed which contains overview of your currently configured partitions. Click on free space and then click “Continue”.

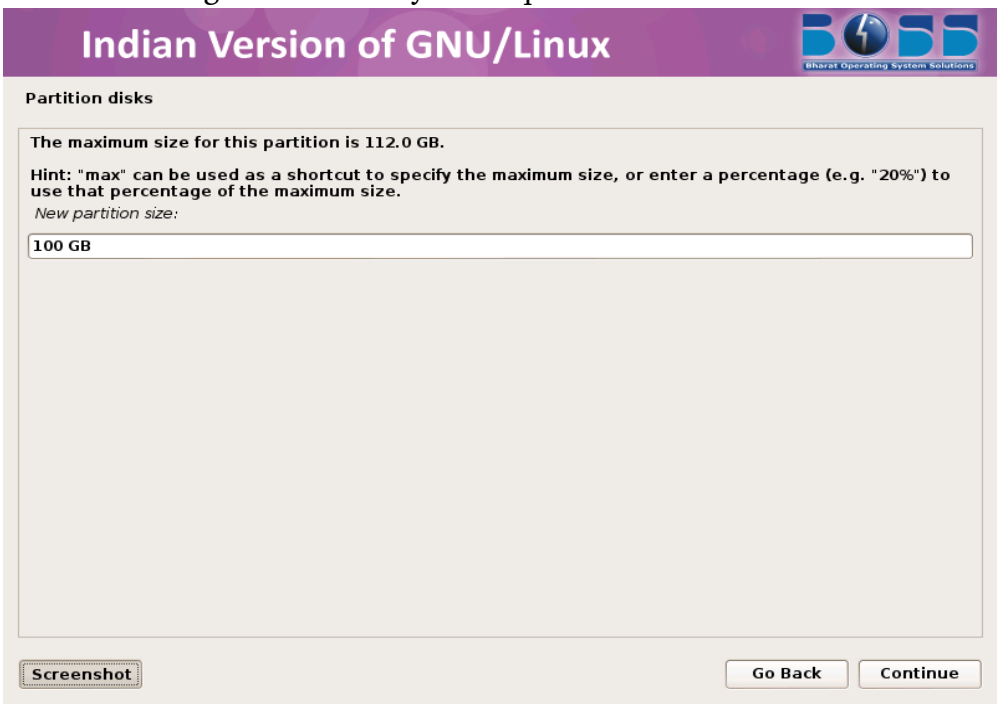

Indian Version of GNU/Linux
Partition disks
This is an overview of your currently configured partitions and mount points. Select a partition to modify its settings (file system, mount point, etc.), a free space to create partitions, or a device to initialize its partition table.
Guided partitioning
Configure software RAID
Configure the Logical Volume Manager
Configure encrypted volumes
SCSI1 (0,0,0) (sda) - 500.1 GB ATA WDC WD5000BPVT-7
> pri/log 500.1 GB FREE SPACE
Undo changes to partitions
Finish partitioning and write changes to disk
Screenshot
Help
Go Back
Continue

3. Create new partition for BOSS GNU/Linux by double clicking “Create a new partition”

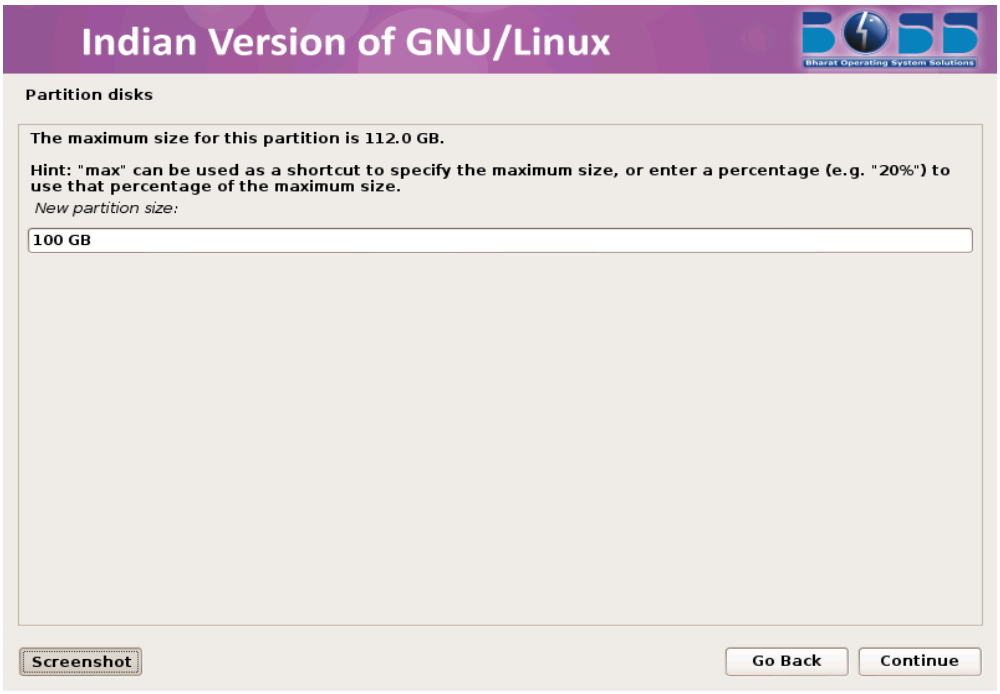


4. A screen appears showing the maximum size that can be assigned for this partition.

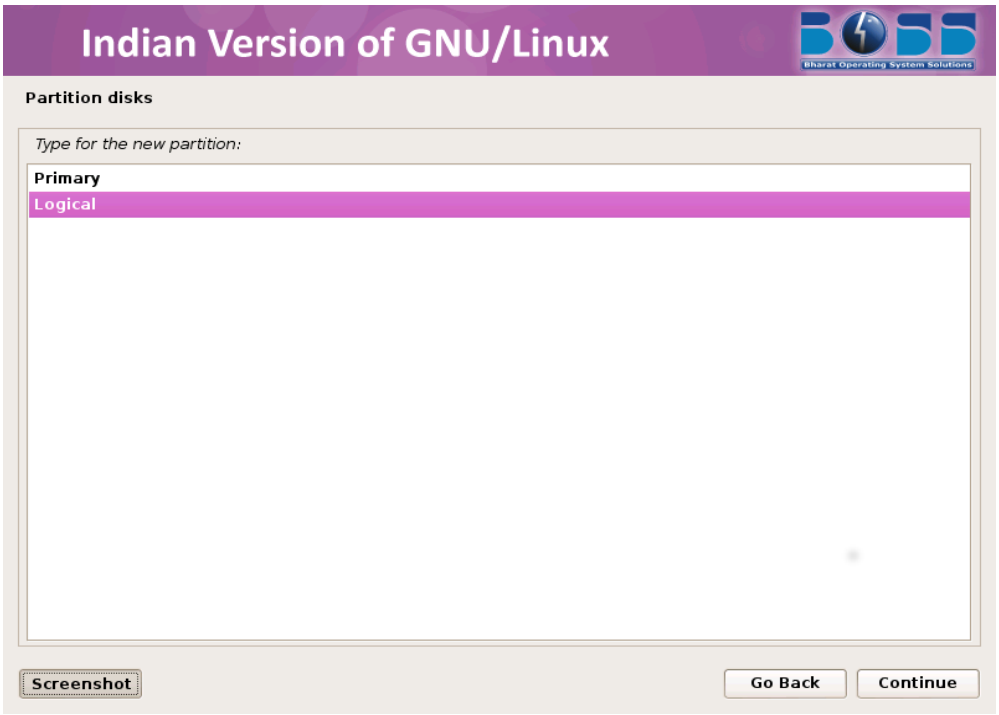
   In this screen change the size to your required size. The minimum should be 5.0 GB.


Indian Version of GNU/Linux
Partition disks
The maximum size for this partition is 112.0 GB.
Hint: "max" can be used as a shortcut to specify the maximum size, or enter a percentage (e.g. "20%") to use that percentage of the maximum size.
New partition size:
100 GB
Screenshot
Go Back
Continue

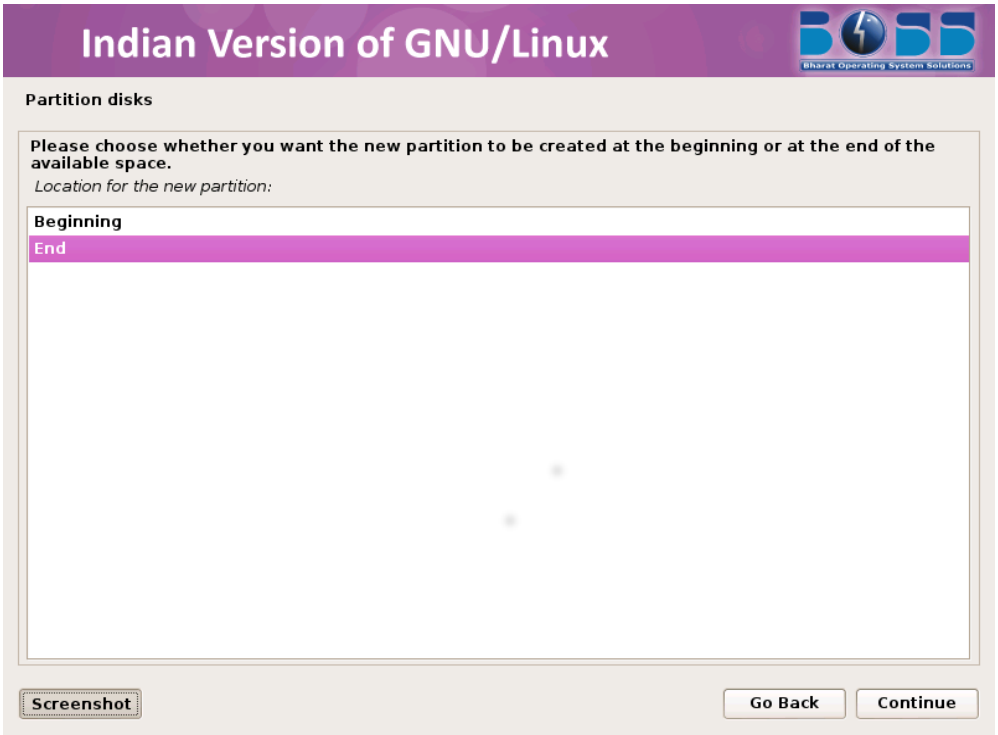
Then click “Continue”.


Indian Version of GNU/Linux
Partition disks
The maximum size for this partition is 112.0 GB.
Hint: "max" can be used as a shortcut to specify the maximum size, or enter a percentage (e.g. "20%") to use that percentage of the maximum size.
New partition size:
100 GB
Screenshot
Go Back
Continue

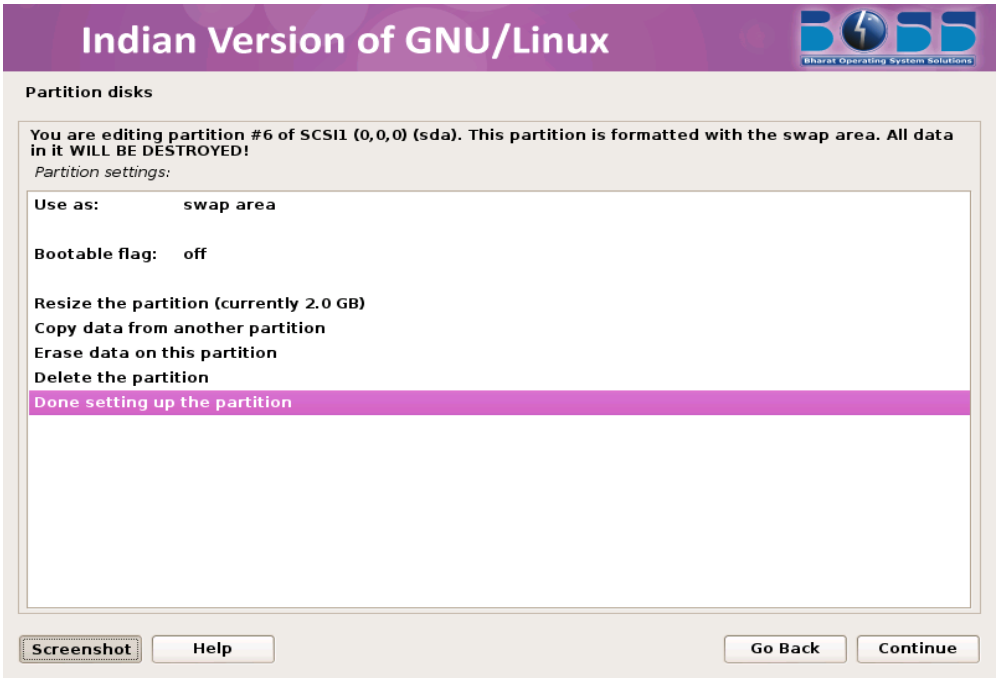
5. Select the type for the new partition.



6. Specify whether the partition should be at the beginning or at the End.

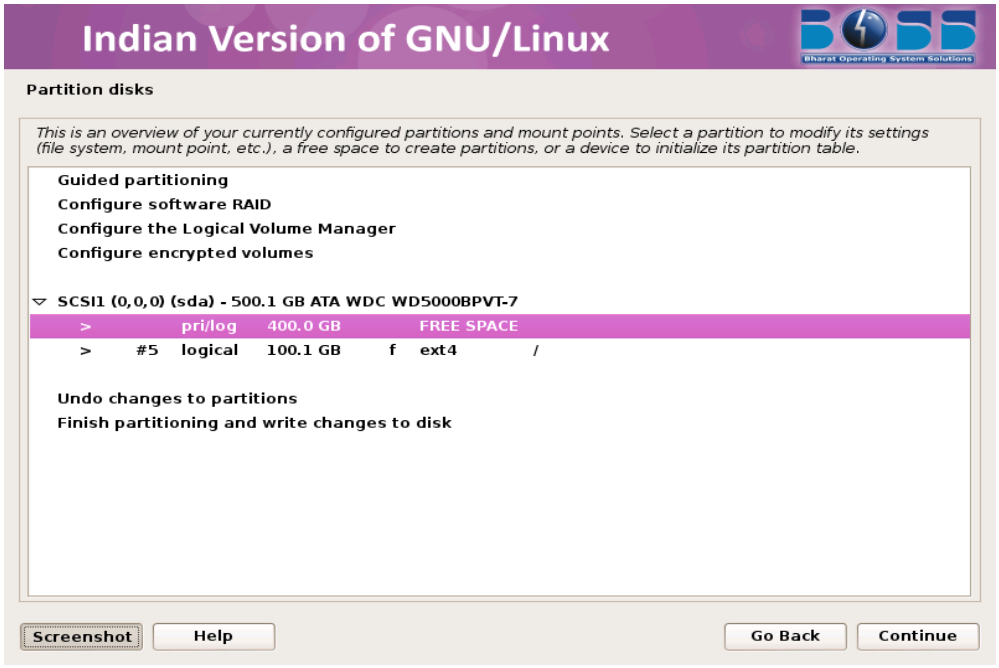

Indian Version of GNU/Linux
Partition disks
Please choose whether you want the new partition to be created at the beginning or at the end of the available space.
Location for the new partition:
Beginning
End
Screenshot
Go Back
Continue

7. Click “Done setting up the partition” and then click “Continue”.


Indian Version of GNU/Linux
Partition disks
You are editing partition #6 of SCSI1 (0,0,0) (sda). This partition is formatted with the swap area. All data in it WILL BE DESTROYED!
Partition settings:
Use as: swap area
Bootable flag: off
Resize the partition (currently 2.0 GB)
Copy data from another partition
Erase data on this partition
Delete the partition
Done setting up the partition
Screenshot
Help
Go Back
Continue

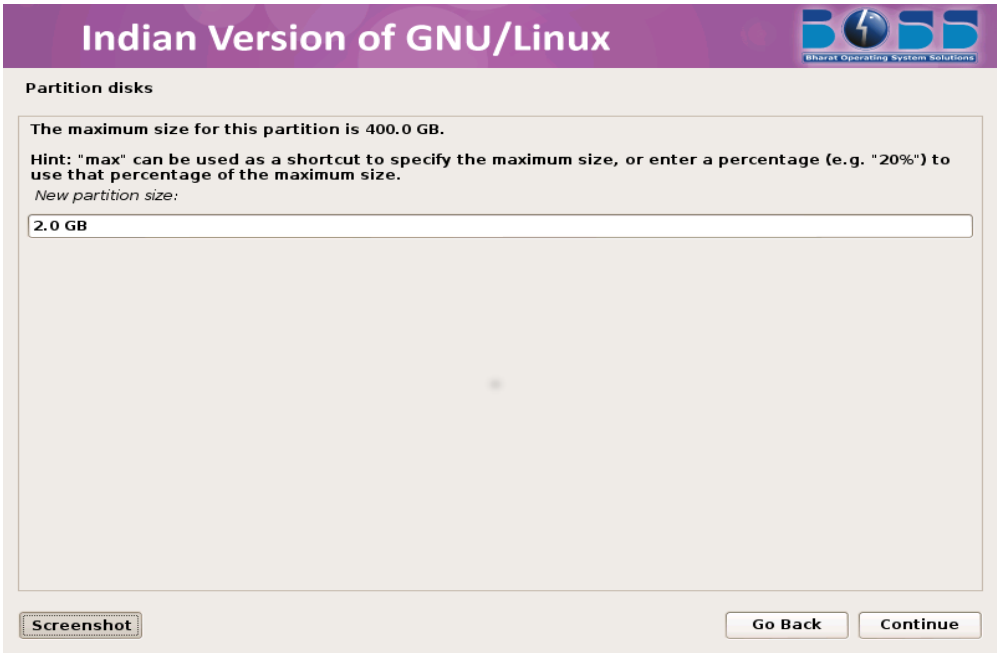
After selecting the partition for the "/", you need to select a partition for the "swap" space. If you are already having Linux installed on your system then you will be having a swap space in your system. If so no need of another swap space. The swap should be double the RAM size. If there is no swap space then create a new swap space. The screen shots are as follows:

8. Create a swap area of 1GB from free space.

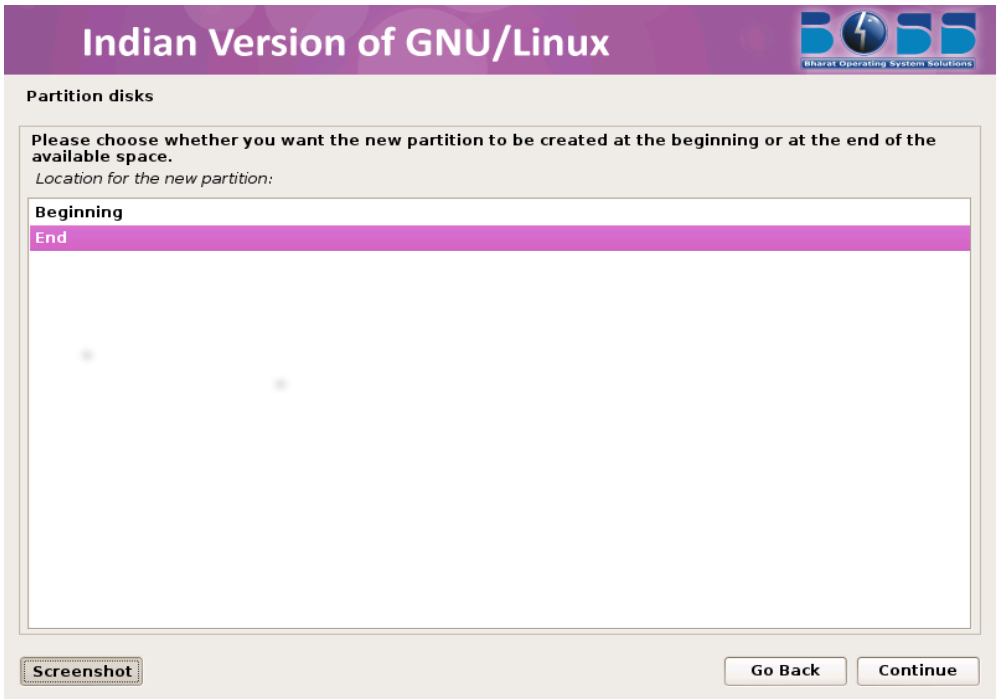

Indian Version of GNU/Linux
Partition disks
This is an overview of your currently configured partitions and mount points. Select a partition to modify its settings (file system, mount point, etc.), a free space to create partitions, or a device to initialize its partition table.
Guided partitioning
Configure software RAID
Configure the Logical Volume Manager
Configure encrypted volumes
SCSI1 (0,0,0) (sda) - 500.1 GB ATA WDC WD5000BPVT-7
> pri/log 400.0 GB FREE SPACE
> #5 logical 100.1 GB f ext4 /
Undo changes to partitions
Finish partitioning and write changes to disk
Screenshot
Help
Go Back
Continue

9. Click "Create a new partition" and then click "Continue".

10. Specify the partition size for swap area as 1.0 GB.

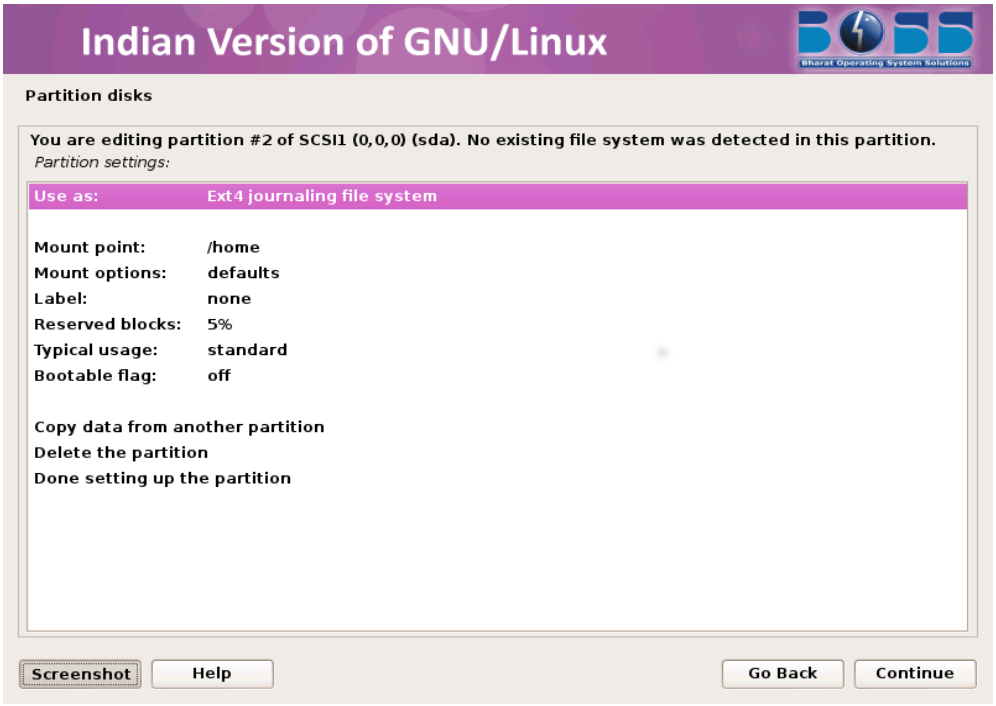

Indian Version of GNU/Linux
Partition disks
The maximum size for this partition is 400.0 GB.
Hint: "max" can be used as a shortcut to specify the maximum size, or enter a percentage (e.g. "20%") to use that percentage of the maximum size.
New partition size:
2.0 GB
Screenshot
Go Back
Continue

11. Select the type for the new partition.

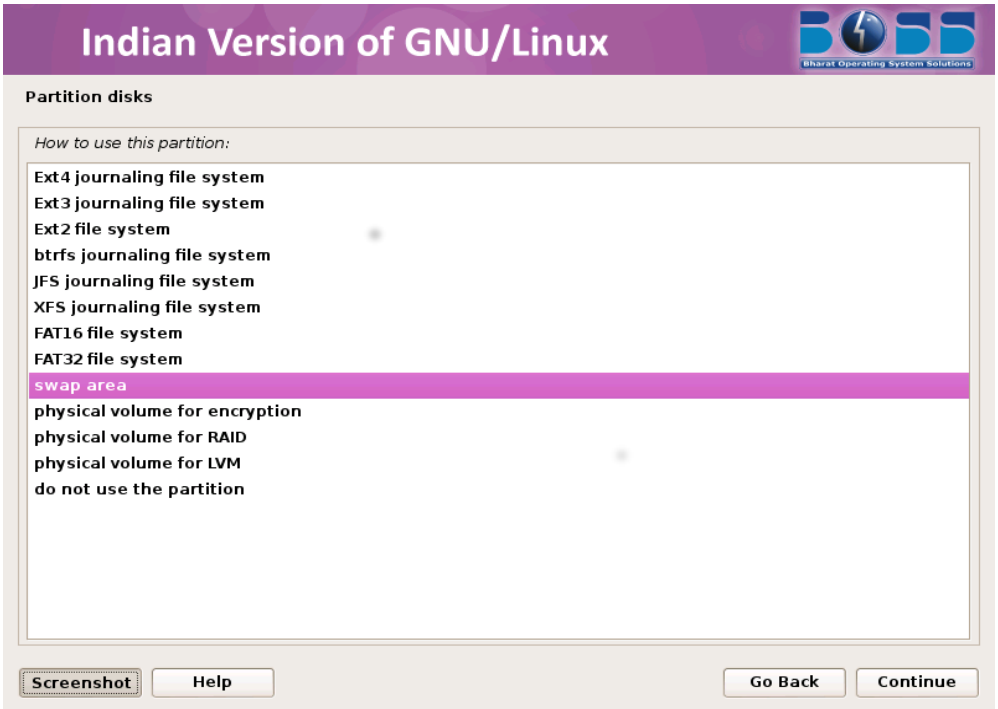

Indian Version of GNU/Linux
Partition disks
Please choose whether you want the new partition to be created at the beginning or at the end of the available space.
Location for the new partition:
Beginning
End
Screenshot
Go Back
Continue

12. Specify whether the partition should be at the beginning or at the End.

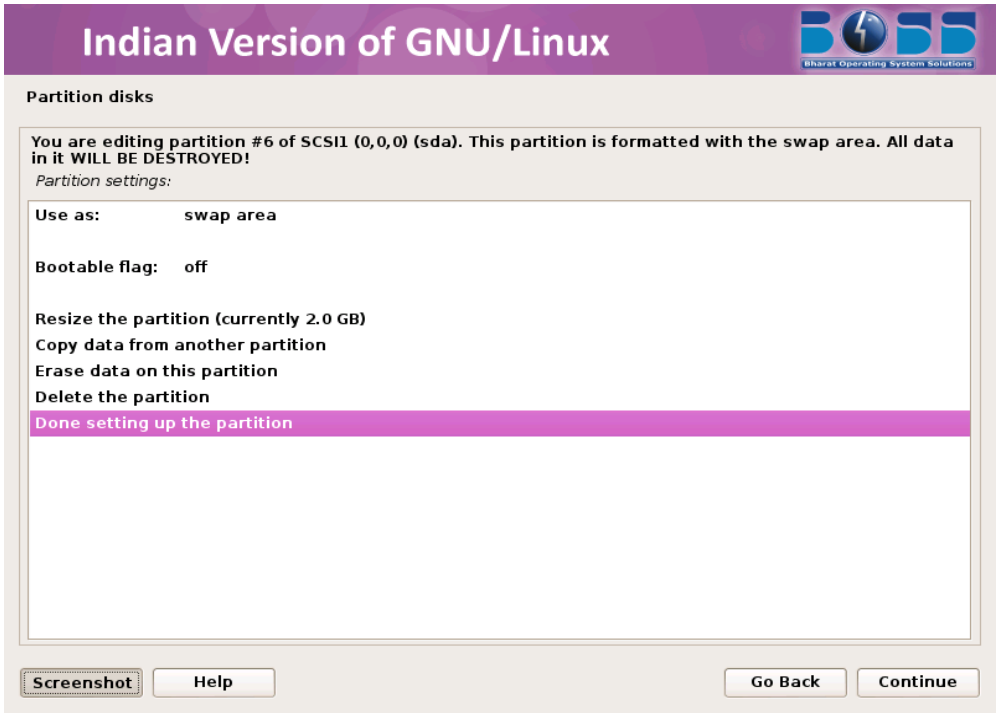
13. Change default file system ext3 to swap by double clicking “Ext3 journaling file system” in the screen shown below.



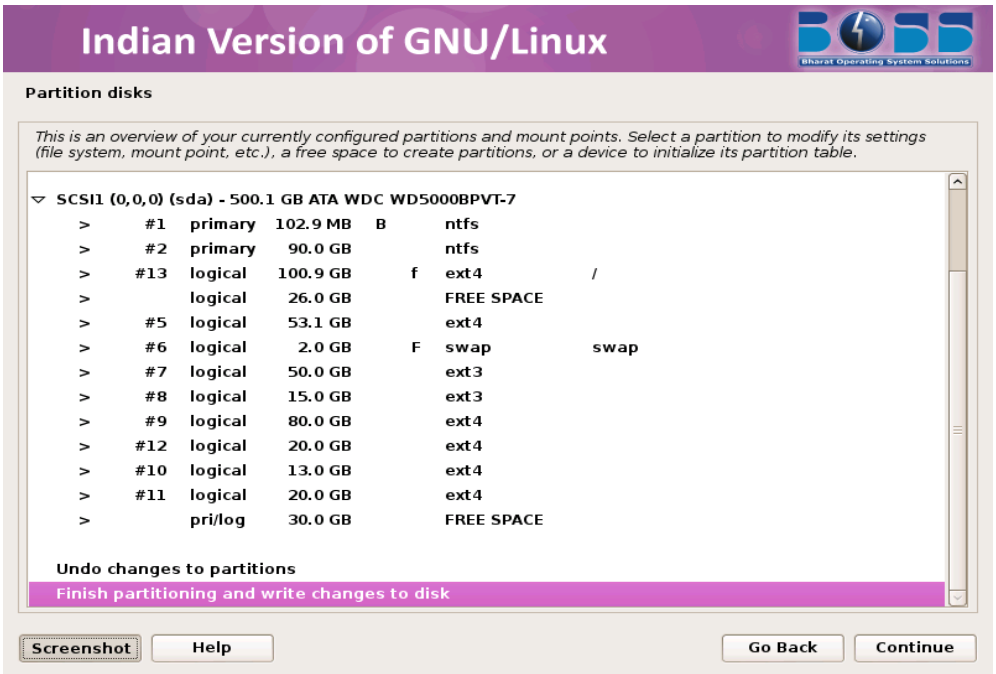
14. Double click “swap area”.



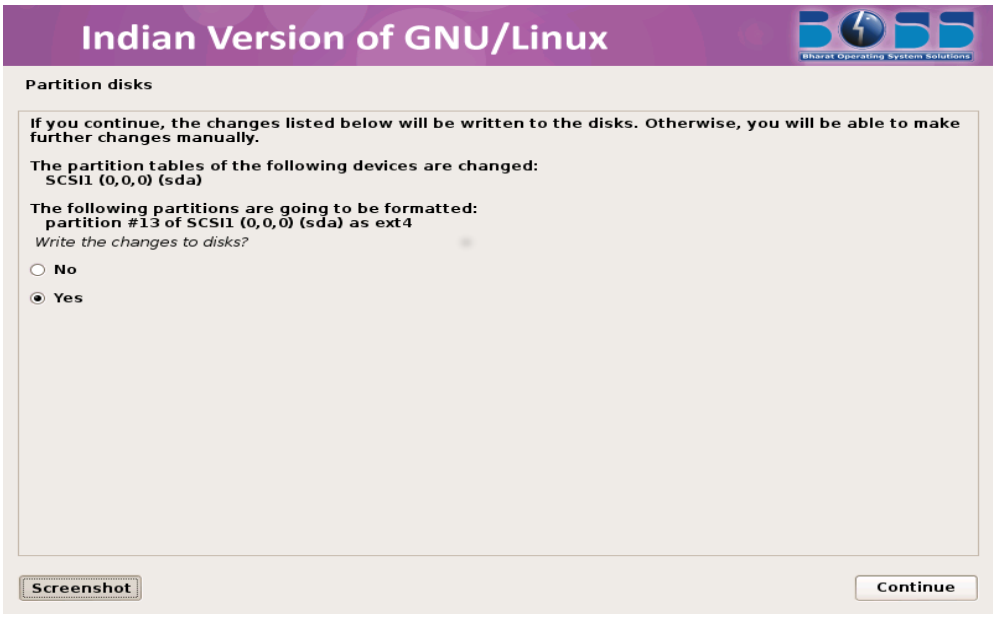
15. Creation of swap area is completed. Click “Done setting up the partition” and then click “Continue”


Indian Version of GNU/Linux
Partition disks
You are editing partition #6 of SCSI1 (0,0,0) (sda). This partition is formatted with the swap area. All data in it WILL BE DESTROYED!
Partition settings:
Use as: swap area
Bootable flag: off
Resize the partition (currently 2.0 GB)
Copy data from another partition
Erase data on this partition
Delete the partition
Done setting up the partition
Screenshot
Help
Go Back
Continue

16. Finish the partitioning process.


Indian Version of GNU/Linux
Partition disks
This is an overview of your currently configured partitions and mount points. Select a partition to modify its settings (file system, mount point, etc.), a free space to create partitions, or a device to initialize its partition table.
SCSI1 (0,0,0) (sda) - 500.1 GB ATA WDC WD5000BPVT-7
> #1 primary 102.9 MB B ntfs
> #2 primary 90.0 GB ntfs
> #13 logical 100.9 GB f ext4 /
> logical 26.0 GB FREE SPACE
> #5 logical 53.1 GB ext4
> #6 logical 2.0 GB F swap swap
> #7 logical 50.0 GB ext3
> #8 logical 15.0 GB ext3
> #9 logical 80.0 GB ext4
> #12 logical 20.0 GB ext4
> #10 logical 13.0 GB ext4
> #11 logical 20.0 GB ext4
> pri/log 30.0 GB FREE SPACE
Undo changes to partitions
Finish partitioning and write changes to disk
Screenshot
Help
Go Back
Continue

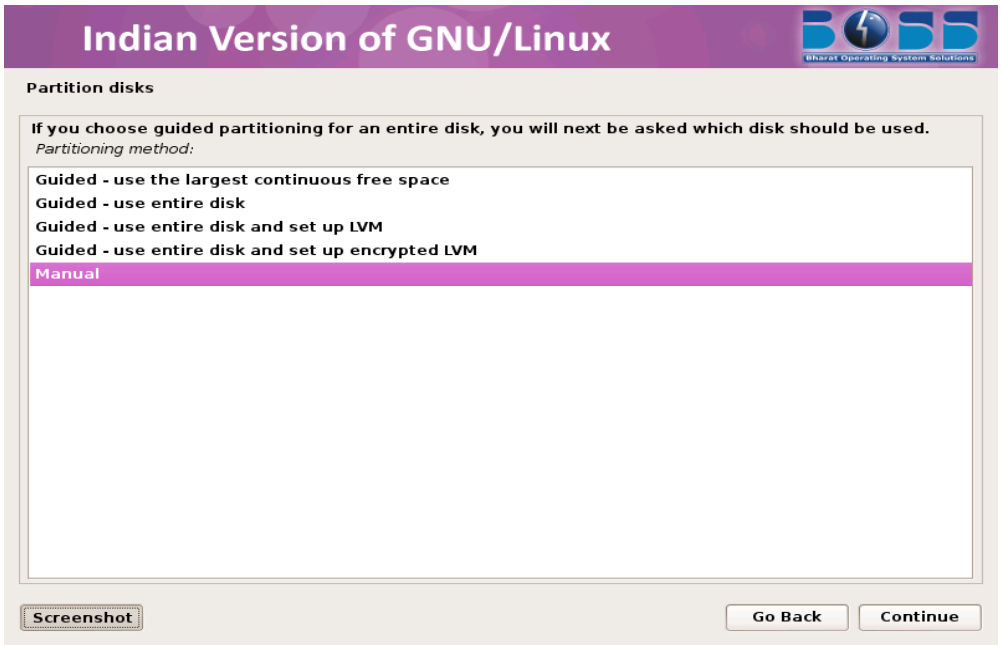
17. Write the changes to disk by clicking “Yes”.


Indian Version of GNU/Linux
Partition disks
If you continue, the changes listed below will be written to the disks. Otherwise, you will be able to make further changes manually.
The partition tables of the following devices are changed:
SCSI1 (0,0,0) (sda)
The following partitions are going to be formatted:
partition #13 of SCSI1 (0,0,0) (sda) as ext4
Write the changes to disks?
No
Yes
Screenshot
Continue

Deleting the hard disk partition

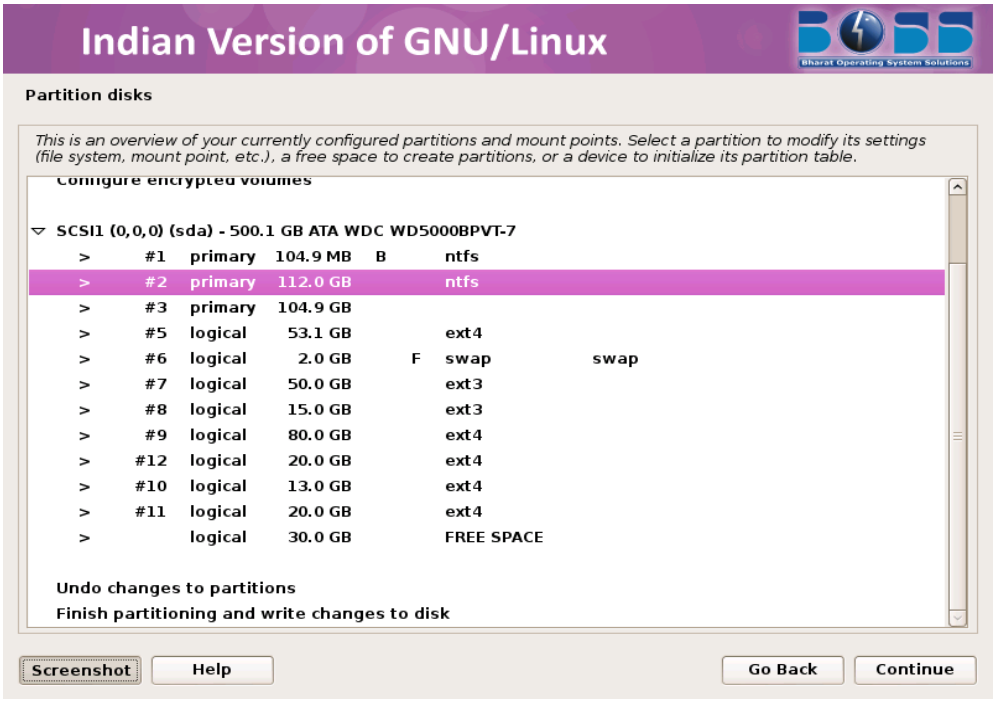
To partition manually , the following screen shots will help you setting up the partitioning separately for “/” and “swap”.

1. A screen with name “Partition disks” will be displayed. In that click on “Manual” and then click on “Continue.”

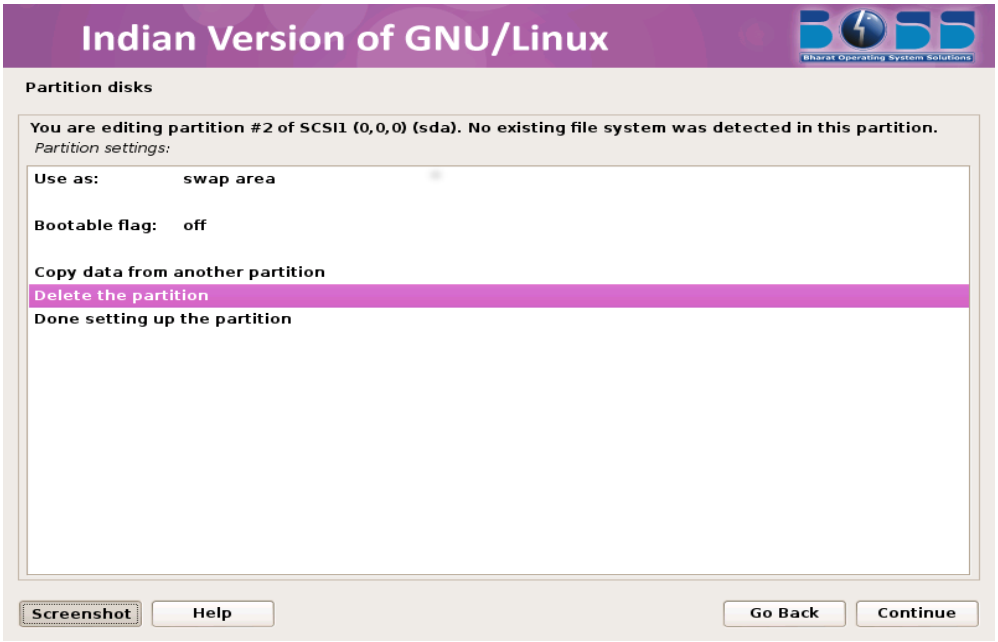

Indian Version of GNU/Linux
Partition disks
If you choose guided partitioning for an entire disk, you will next be asked which disk should be used.
Partitioning method:
Guided - use the largest continuous free space
Guided - use entire disk
Guided - use entire disk and set up LVM
Guided - use entire disk and set up encrypted LVM
Manual
Screenshot
Go Back
Continue

2. After clicking “Manual” a screen will be displayed which contains overview of your currently configured partitions and mount points.

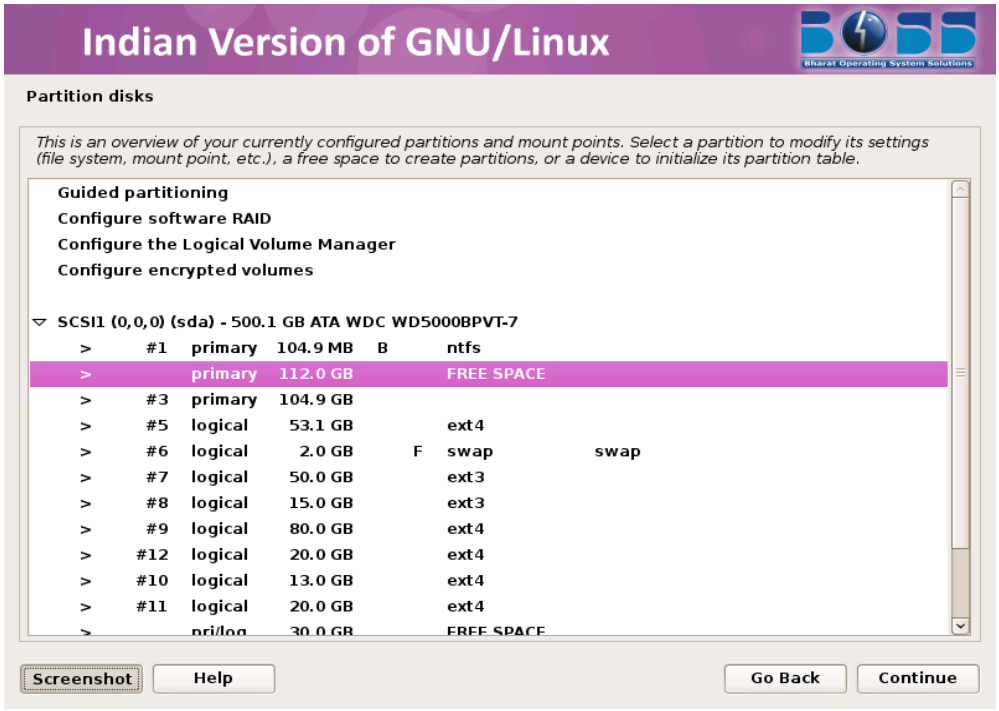
   Then click on partition which you want to delete and then click “Continue”.


Indian Version of GNU/Linux
Partition disks
This is an overview of your currently configured partitions and mount points. Select a partition to modify its settings (file system, mount point, etc.), a free space to create partitions, or a device to initialize its partition table.
Configure encrypted volumes
SCSI1 (0,0,0) (sda) - 500.1 GB ATA WDC WD5000BPVT-7
> #1 primary 104.9 MB B ntfs
> #2 primary 112.0 GB ntfs
> #3 primary 104.9 GB
> #5 logical 53.1 GB ext4
> #6 logical 2.0 GB F swap swap
> #7 logical 50.0 GB ext3
> #8 logical 15.0 GB ext3
> #9 logical 80.0 GB ext4
> #12 logical 20.0 GB ext4
> #10 logical 13.0 GB ext4
> #11 logical 20.0 GB ext4
> logical 30.0 GB FREE SPACE
Undo changes to partitions
Finish partitioning and write changes to disk
Screenshot
Help
Go Back
Continue

3. Click on “Delete the partition” and then click “Continue”.

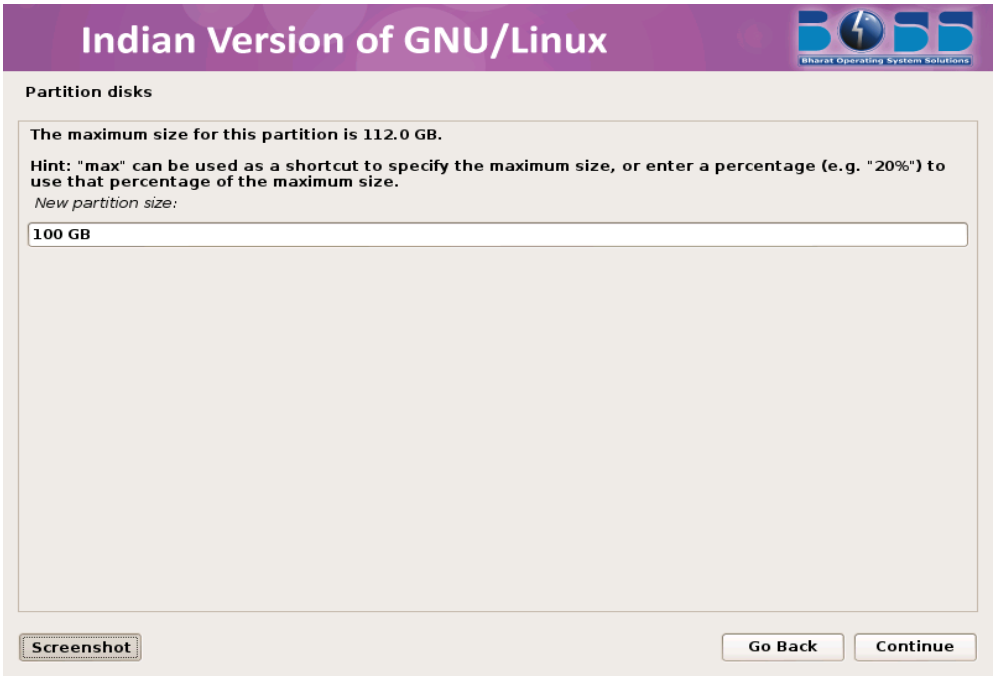


4. Once that partition is deleted you will get some free space.

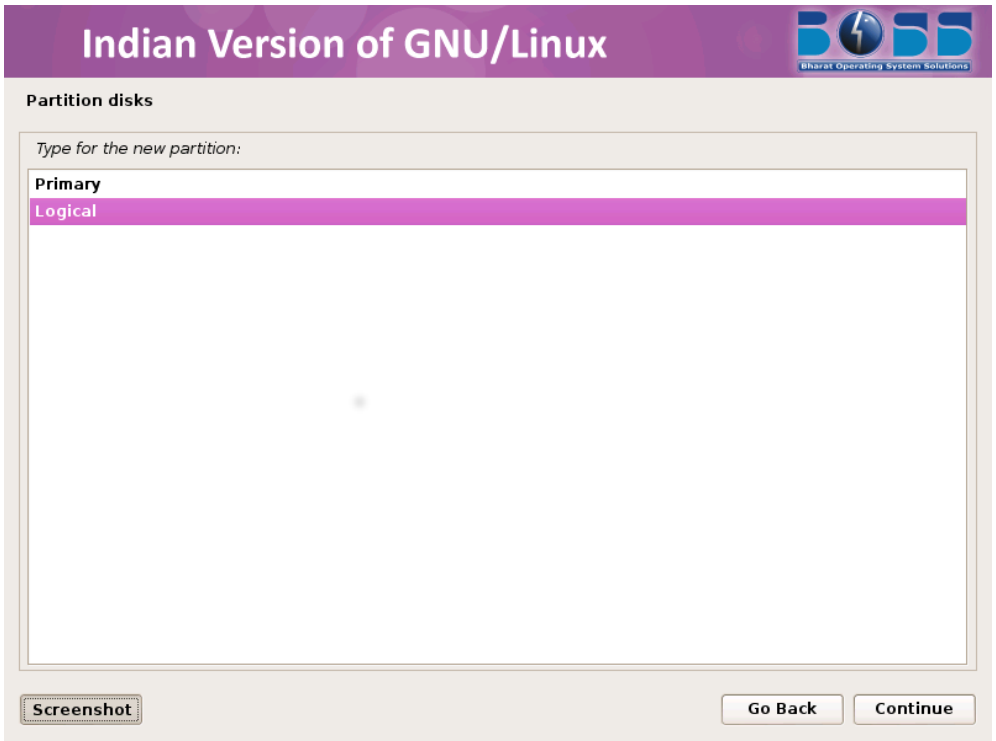

Indian Version of GNU/Linux
Partition disks
This is an overview of your currently configured partitions and mount points. Select a partition to modify its settings (file system, mount point, etc.), a free space to create partitions, or a device to initialize its partition table.
Guided partitioning
Configure software RAID
Configure the Logical Volume Manager
Configure encrypted volumes
SCSI1 (0,0,0) (sda) - 500.1 GB ATA WDC WD5000BPVT-7
> #1 primary 104.9 MB B ntfs
> primary 112.0 GB FREE SPACE
> #3 primary 104.9 GB
> #5 logical 53.1 GB ext4
> #6 logical 2.0 GB F swap swap
> #7 logical 50.0 GB ext3
> #8 logical 15.0 GB ext3
> #9 logical 80.0 GB ext4
> #12 logical 20.0 GB ext4
> #10 logical 13.0 GB ext4
> #11 logical 20.0 GB ext4
Screenshot
Help
Go Back
Continue

5. To create a new partition using that free space double-click on “Create a new partition”.

6. In the next screen specify the new partition size. The minimum size should be 5.0GB.

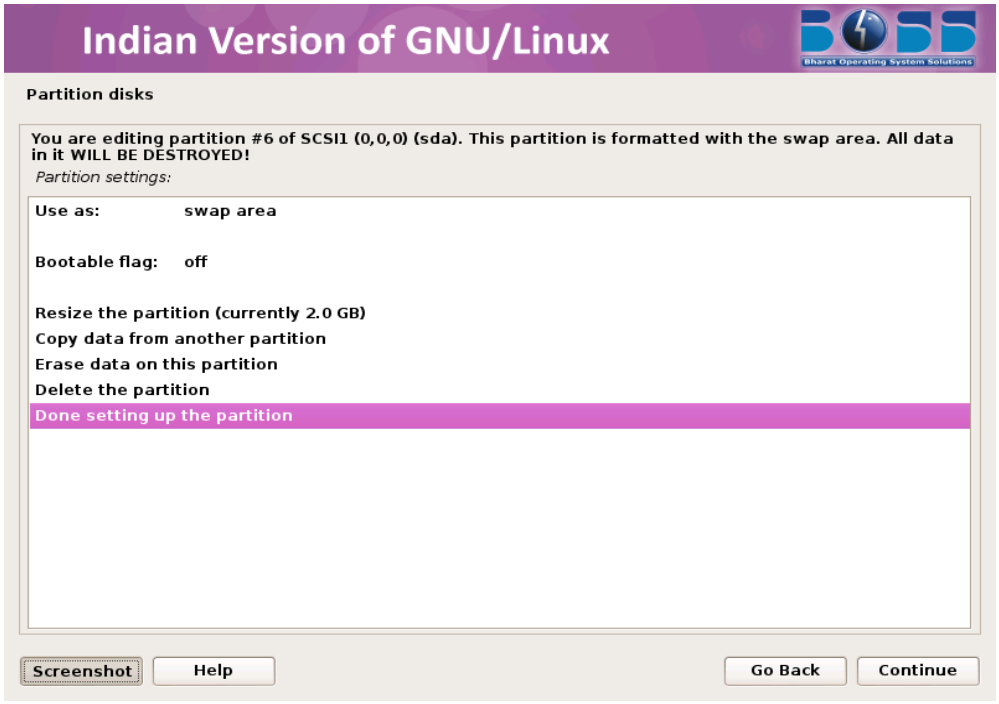

Indian Version of GNU/Linux
Partition disks
The maximum size for this partition is 112.0 GB.
Hint: "max" can be used as a shortcut to specify the maximum size, or enter a percentage (e.g. "20%") to use that percentage of the maximum size.
New partition size:
100 GB
Screenshot
Go Back
Continue

7. Select the type for the new partition.



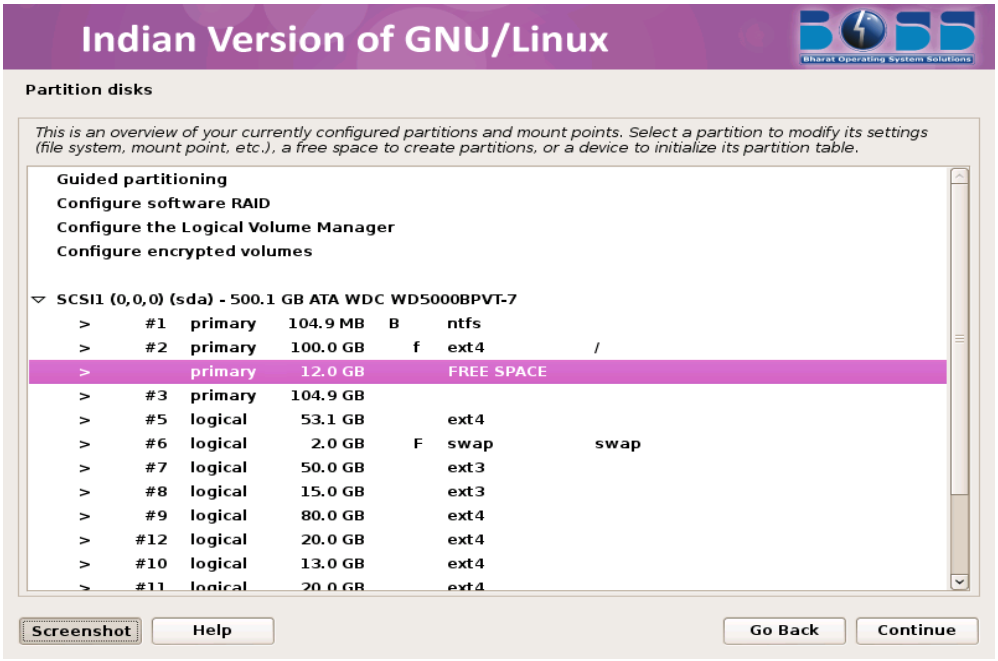
8. Specify whether the partition should be at the beginning or at the End.

9. Click “Done setting up the partition” and then click “Continue”.


Indian Version of GNU/Linux
Partition disks
You are editing partition #6 of SCSI1 (0,0,0) (sda). This partition is formatted with the swap area. All data in it WILL BE DESTROYED!
Partition settings:
Use as: swap area
Bootable flag: off
Resize the partition (currently 2.0 GB)
Copy data from another partition
Erase data on this partition
Delete the partition
Done setting up the partition
Screenshot
Help
Go Back
Continue

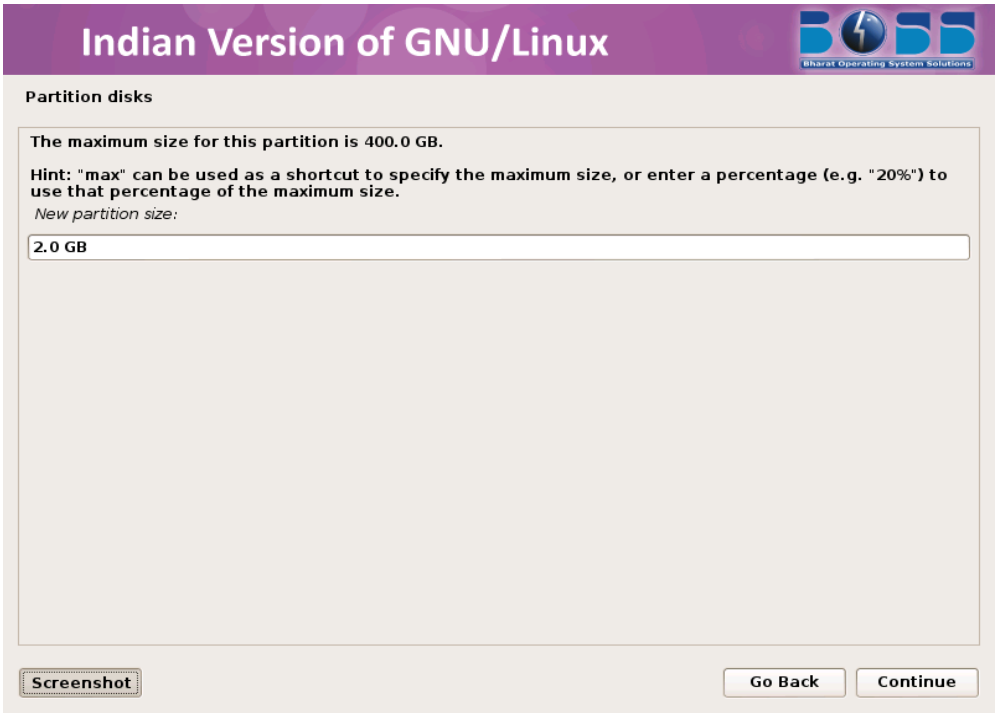
After selecting the partition for the “/”, you need to select a partition for the “swap” space. If you are already having Linux installed on your system then you will be having a swap space in your system. If so no need of another swap space. The swap should be double the RAM size. If there is no swap then create a new swap space. The screen shots are as follows:

10. Create swap area of 1GB from free space

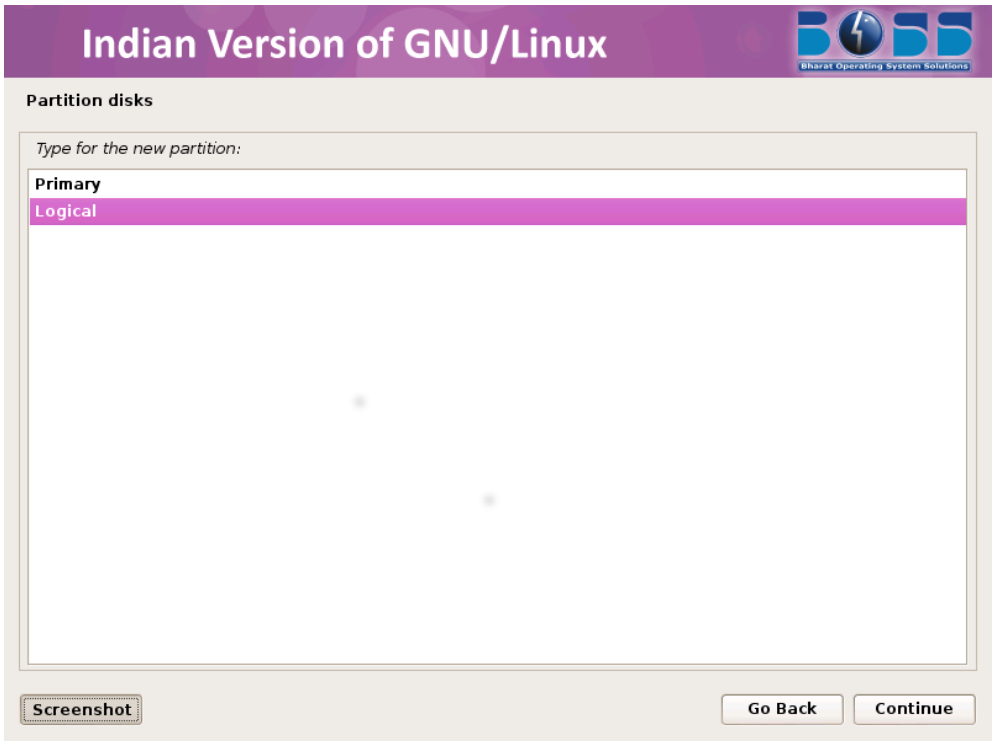

Indian Version of GNU/Linux
Partition disks
This is an overview of your currently configured partitions and mount points. Select a partition to modify its settings (file system, mount point, etc.), a free space to create partitions, or a device to initialize its partition table.
Guided partitioning
Configure software RAID
Configure the Logical Volume Manager
Configure encrypted volumes
SCSI1 (0,0,0) (sda) - 500.1 GB ATA WDC WD5000BPVT-7
> #1 primary 104.9 MB B ntfs
> #2 primary 100.0 GB f ext4 /
> primary 12.0 GB FREE SPACE
> #3 primary 104.9 GB
> #5 logical 53.1 GB ext4
> #6 logical 2.0 GB F swap swap
> #7 logical 50.0 GB ext3
> #8 logical 15.0 GB ext3
> #9 logical 80.0 GB ext4
> #12 logical 20.0 GB ext4
> #10 logical 13.0 GB ext4
Screenshot
Help
Go Back
Continue

11. Create new swap area by double clicking “Create a new partition”.

12. Specify the partition size for swap area as 1.0 GB.

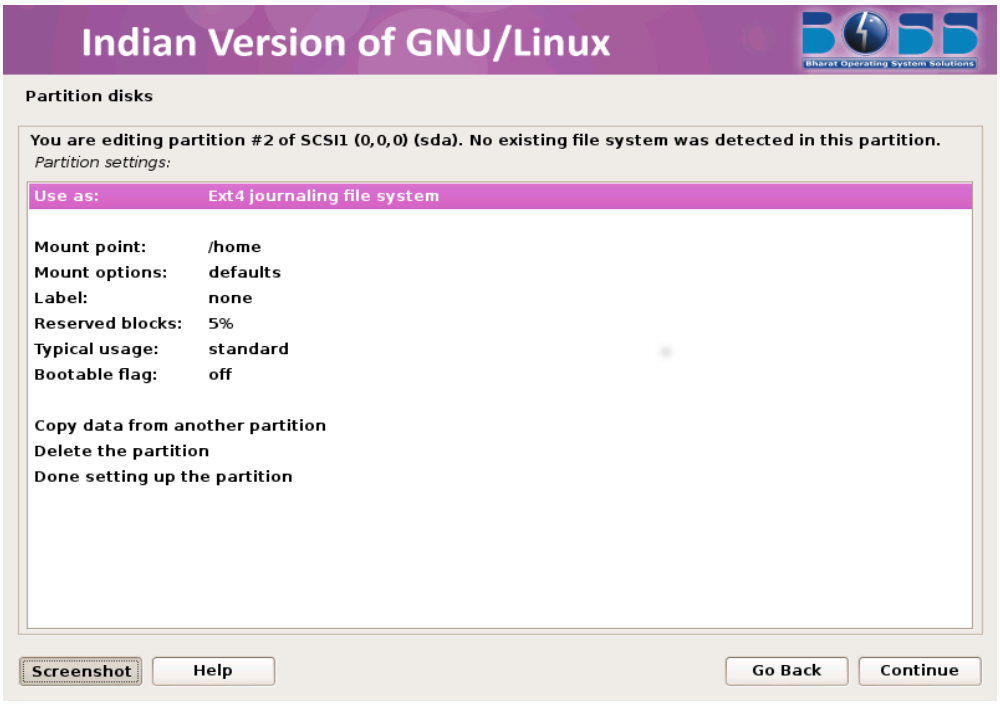

Indian Version of GNU/Linux
Partition disks
The maximum size for this partition is 400.0 GB.
Hint: "max" can be used as a shortcut to specify the maximum size, or enter a percentage (e.g. "20%") to use that percentage of the maximum size.
New partition size:
2.0 GB
Screenshot
Go Back
Continue

13. Select the type for the new partition.

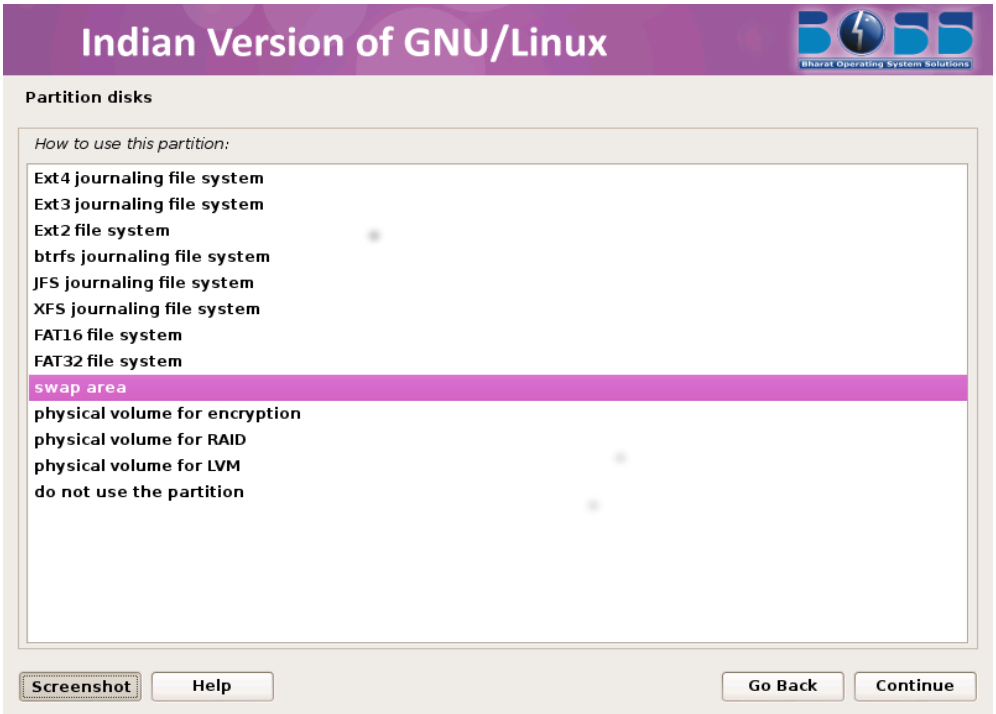


14. Specify whether the partition should be at the beginning or at the End.

15. Change default file system ext3 to swap by double clicking “Ext3 journaling file system” in the screen shown below.

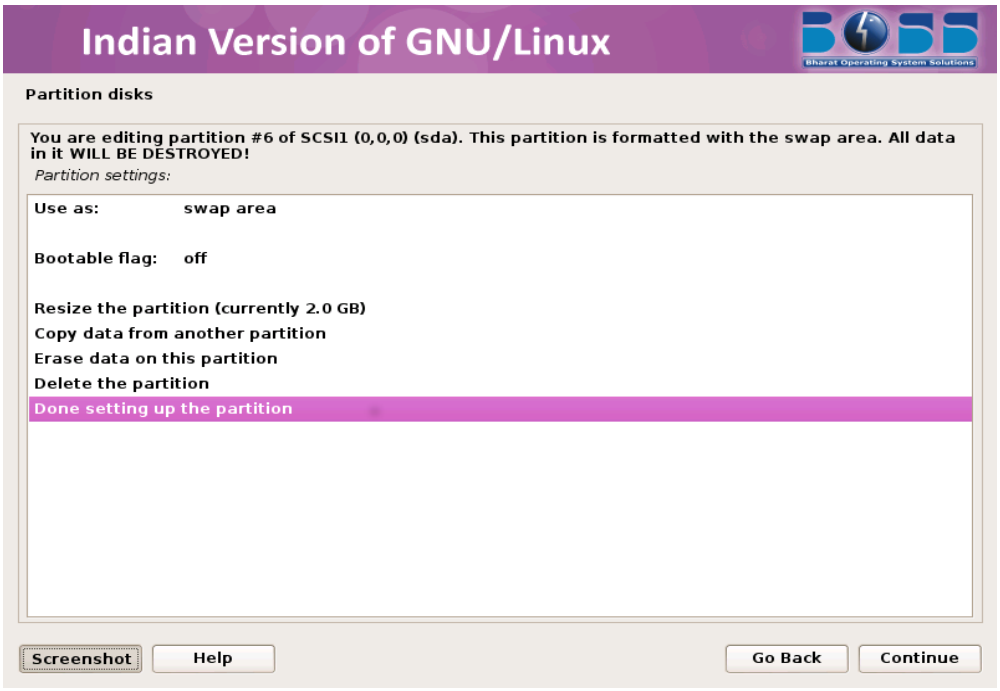


16. Double click on “swap area”.

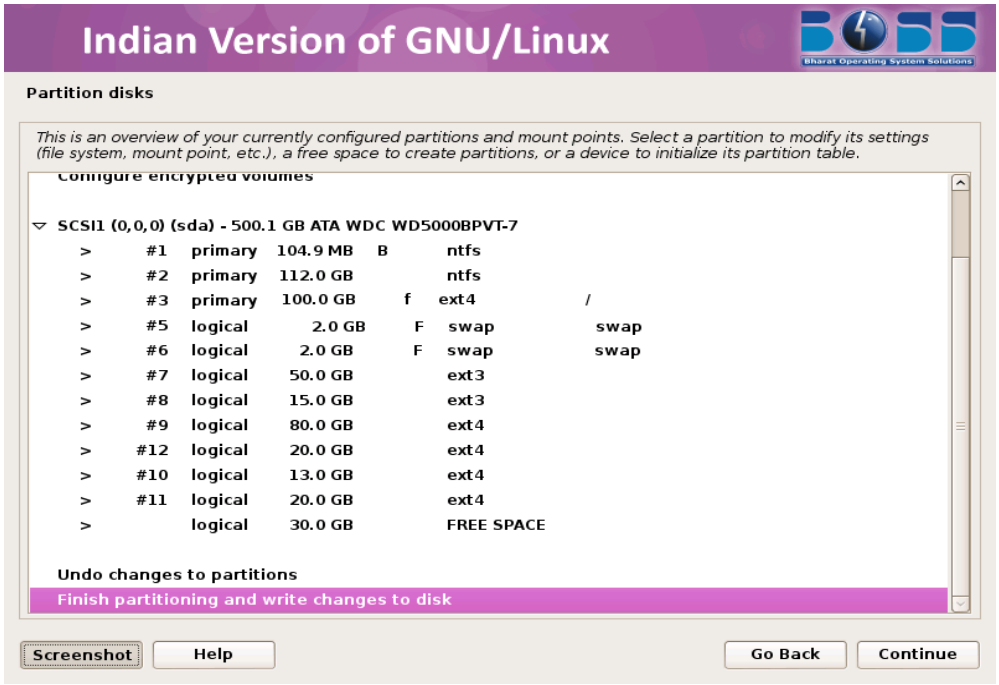


17. Creation of swap area is completed. Click on “Done setting up the partition” and then

click “Continue”

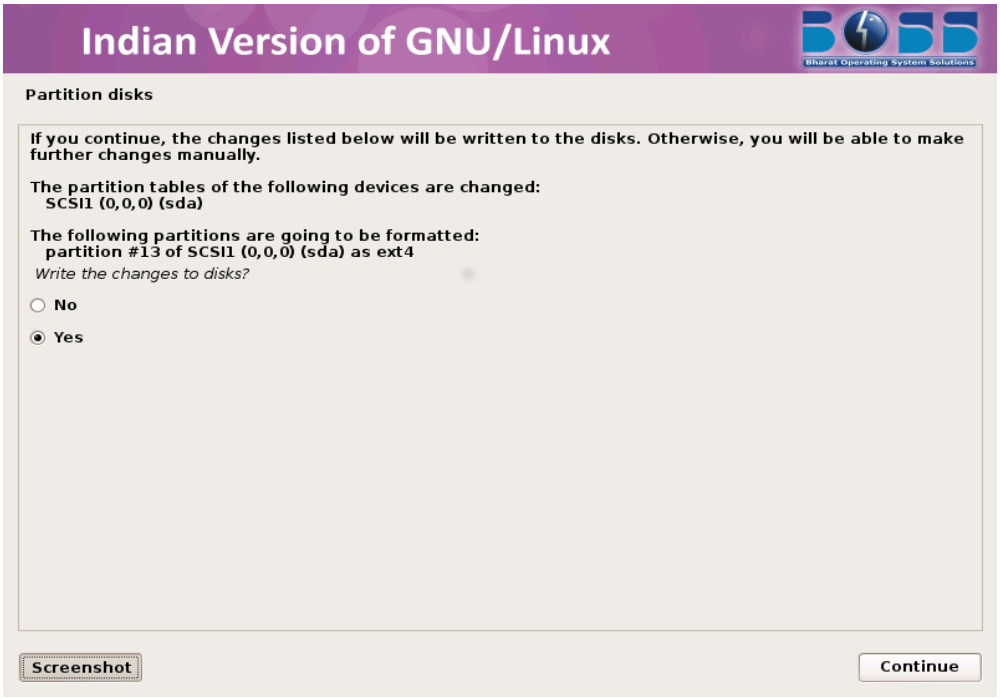

Indian Version of GNU/Linux
Partition disks
You are editing partition #6 of SCSI1 (0,0,0) (sda). This partition is formatted with the swap area. All data in it WILL BE DESTROYED!
Partition settings:
Use as: swap area
Bootable flag: off
Resize the partition (currently 2.0 GB)
Copy data from another partition
Erase data on this partition
Delete the partition
Done setting up the partition
Screenshot
Help
Go Back
Continue

18. Finish the partitioning process.


Indian Version of GNU/Linux
Partition disks
This is an overview of your currently configured partitions and mount points. Select a partition to modify its settings (file system, mount point, etc.), a free space to create partitions, or a device to initialize its partition table.
Configure encrypted volumes
SCSI1 (0,0,0) (sda) - 500.1 GB ATA WDC WD5000BPVT-7
> #1 primary 104.9 MB B ntfs
> #2 primary 112.0 GB ntfs
> #3 primary 100.0 GB f ext4 /
> #5 logical 2.0 GB F swap swap
> #6 logical 2.0 GB F swap swap
> #7 logical 50.0 GB ext3
> #8 logical 15.0 GB ext3
> #9 logical 80.0 GB ext4
> #12 logical 20.0 GB ext4
> #10 logical 13.0 GB ext4
> #11 logical 20.0 GB ext4
> logical 30.0 GB FREE SPACE
Undo changes to partitions
Finish partitioning and write changes to disk
Screenshot
Help
Go Back
Continue

19. After all the partitions are allocated, you need to write the changes to disk. For this

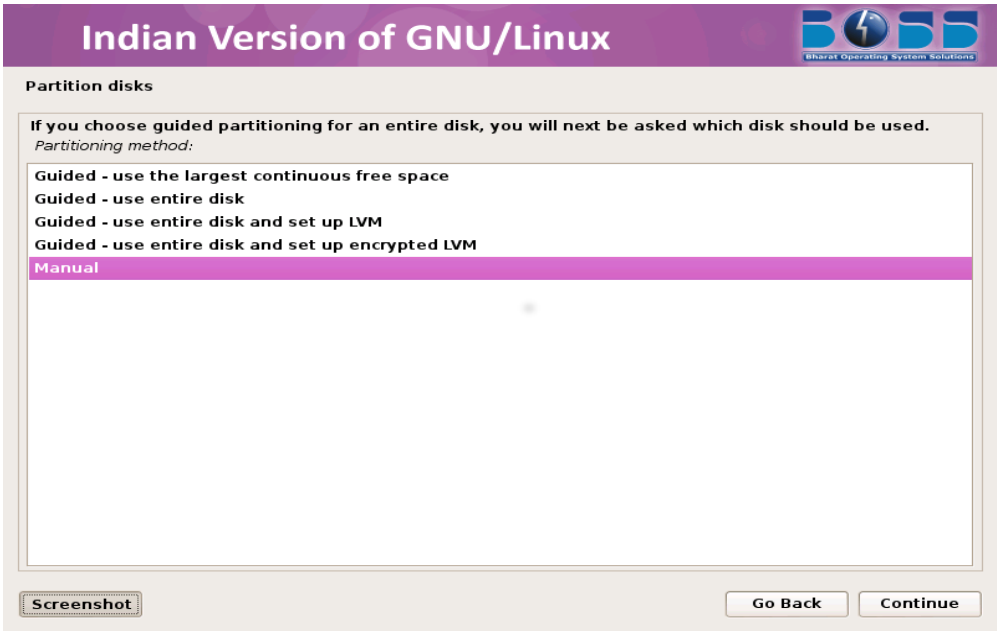
select “Yes” in in the following screen and then click “Continue”.


Indian Version of GNU/Linux
Partition disks
If you continue, the changes listed below will be written to the disks. Otherwise, you will be able to make further changes manually.
The partition tables of the following devices are changed:
SCSI1 (0,0,0) (sda)
The following partitions are going to be formatted:
partition #13 of SCSI1 (0,0,0) (sda) as ext4
Write the changes to disks?
No
Yes
Screenshot
Continue

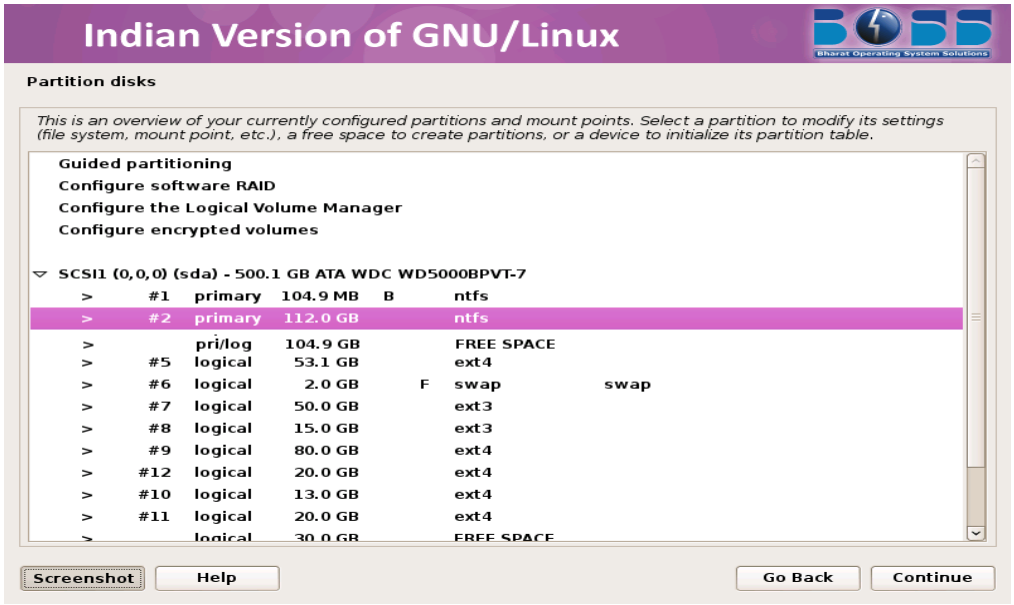
Resizing the Hard disk Partition

To resize hard disk partition at the time of installing BOSS GNU/Linux, follow these steps:

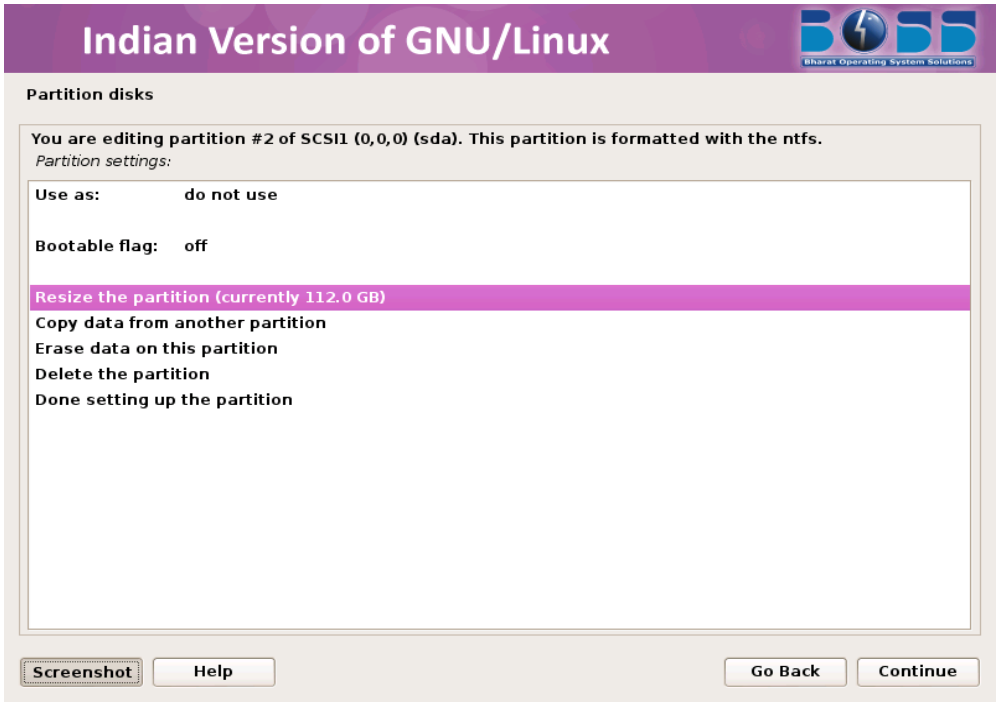
1. A screen with name “Partition disks” will be displayed. In that click “Manual” and then click “Continue.”


Indian Version of GNU/Linux
Partition disks
If you choose guided partitioning for an entire disk, you will next be asked which disk should be used.
Partitioning method:
Guided - use the largest continuous free space
Guided - use entire disk
Guided - use entire disk and set up LVM
Guided - use entire disk and set up encrypted LVM
Manual
Screenshot
Go Back
Continue

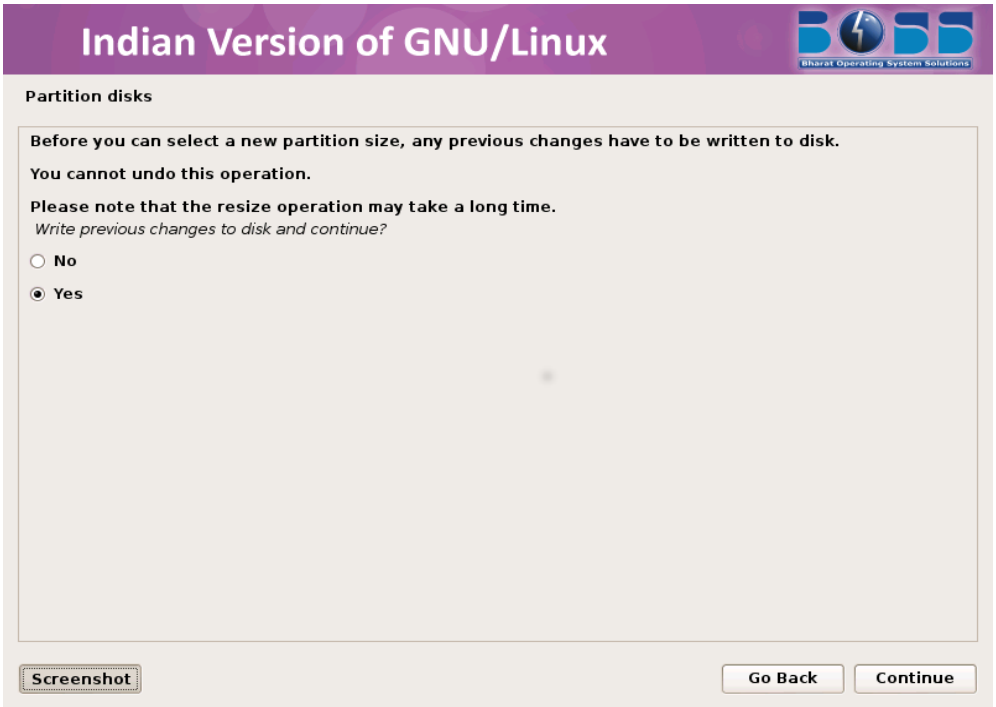
2. After clicking “Manual” a screen will be displayed which contains overview of your currently configured partitions and mount points. Then click on the partition which you want to resize and then click “Continue”.


Indian Version of GNU/Linux
Partition disks
This is an overview of your currently configured partitions and mount points. Select a partition to modify its settings (file system, mount point, etc.), a free space to create partitions, or a device to initialize its partition table.
Guided partitioning
Configure software RAID
Configure the Logical Volume Manager
Configure encrypted volumes
SCSI1 (0,0,0) (sda) - 500.1 GB ATA WDC WD5000BPVT-7
> #1 primary 104.9 MB B ntfs
> #2 primary 112.0 GB ntfs
> pri/log 104.9 GB FREE SPACE
> #5 logical 53.1 GB ext4
> #6 logical 2.0 GB F swap swap
> #7 logical 50.0 GB ext3
> #8 logical 15.0 GB ext3
> #9 logical 80.0 GB ext4
> #12 logical 20.0 GB ext4
> #10 logical 13.0 GB ext4
> #11 logical 20.0 GB ext4
Screenshot
Help
Go Back
Continue

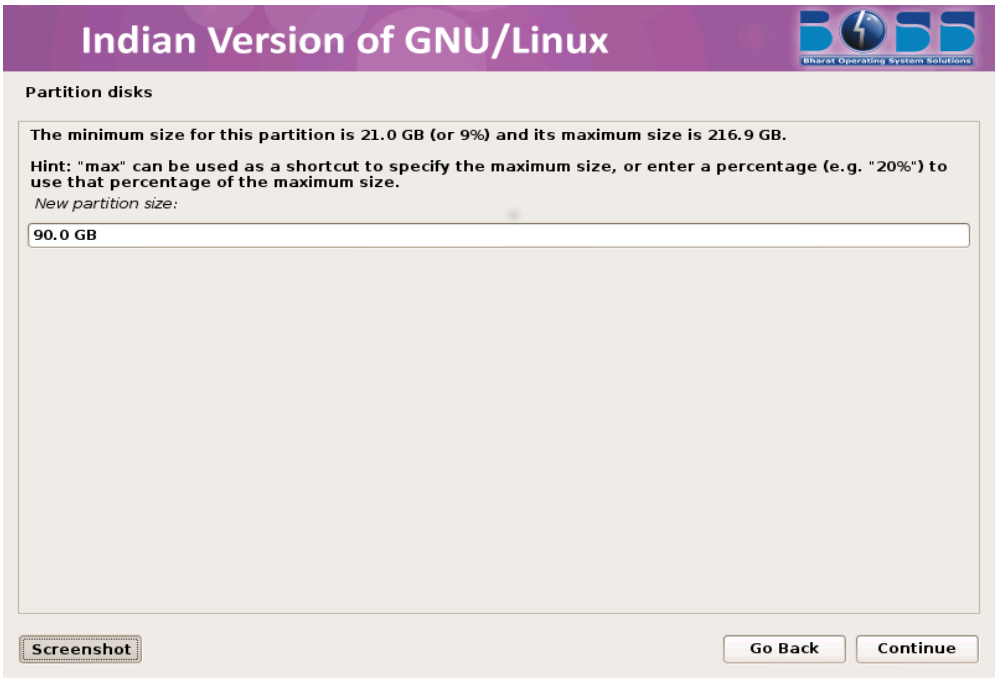
3. Double click on “Resize the partition”.


Indian Version of GNU/Linux
Partition disks
You are editing partition #2 of SCSI1 (0,0,0) (sda). This partition is formatted with the ntfs.
Partition settings:
Use as: do not use
Bootable flag: off
Resize the partition (currently 112.0 GB)
Copy data from another partition
Erase data on this partition
Delete the partition
Done setting up the partition
Screenshot
Help
Go Back
Continue

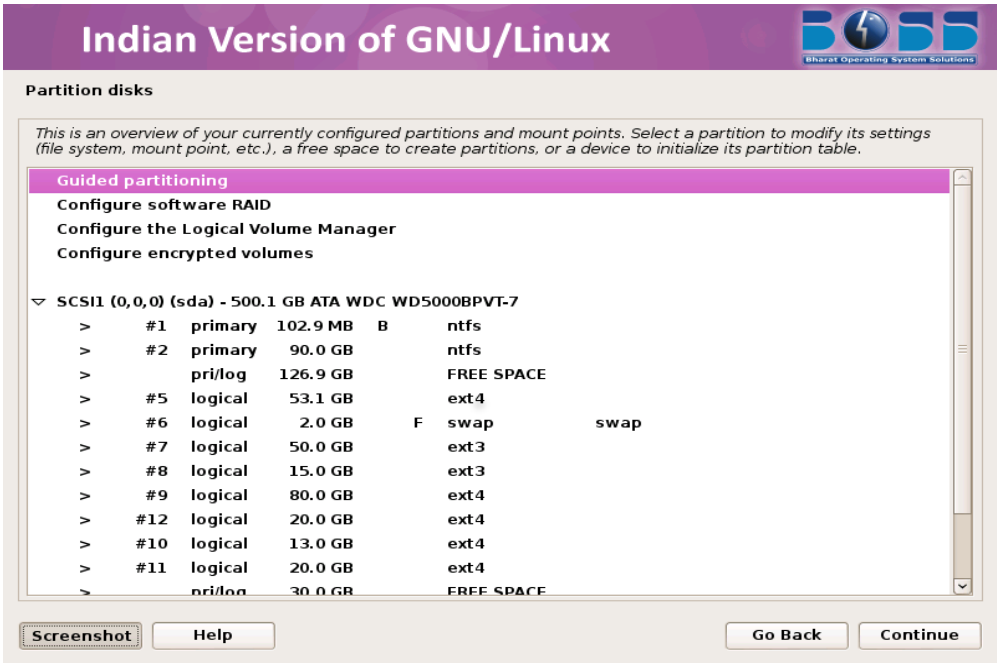
4. It will ask the confirmation before writing the changes to disk. Click “Yes” and then click “Continue”.


Indian Version of GNU/Linux
Partition disks
Before you can select a new partition size, any previous changes have to be written to disk.
You cannot undo this operation.
Please note that the resize operation may take a long time.
Write previous changes to disk and continue?
No
Yes
Screenshot
Go Back
Continue

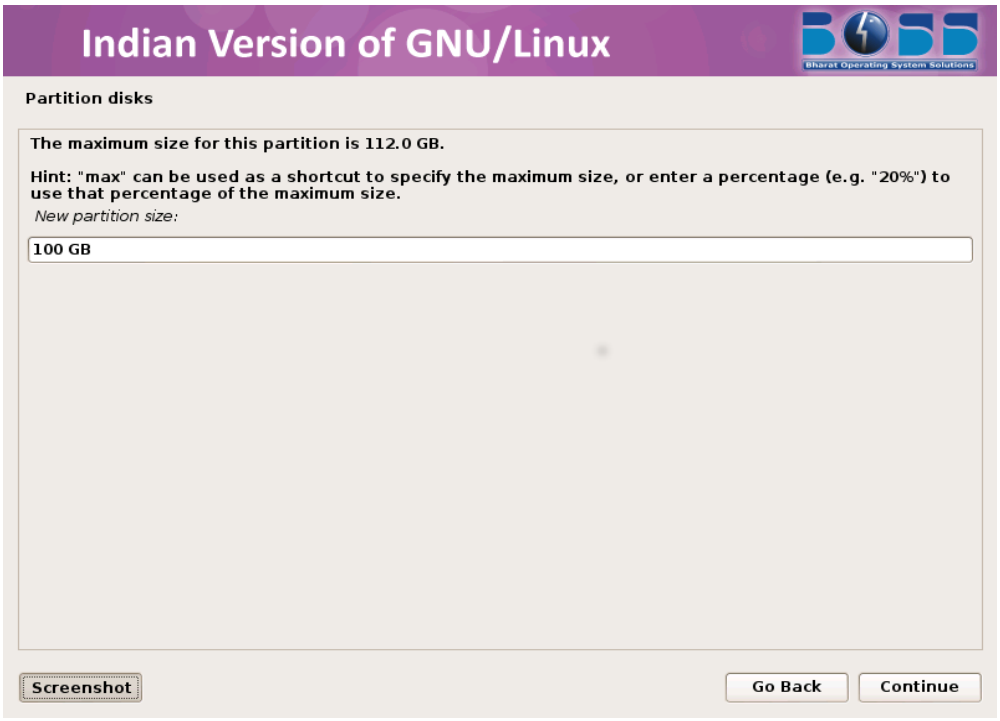
5. This screen will show by default maximum size as a new partition size which you can change as per requirement. You can give new partition size more than whatever required to that particular file system then click “Continue”.


Indian Version of GNU/Linux
Partition disks
The minimum size for this partition is 21.0 GB (or 9%) and its maximum size is 216.9 GB.
Hint: "max" can be used as a shortcut to specify the maximum size, or enter a percentage (e.g. "20%") to use that percentage of the maximum size.
New partition size:
90.0 GB
Screenshot
Go Back
Continue

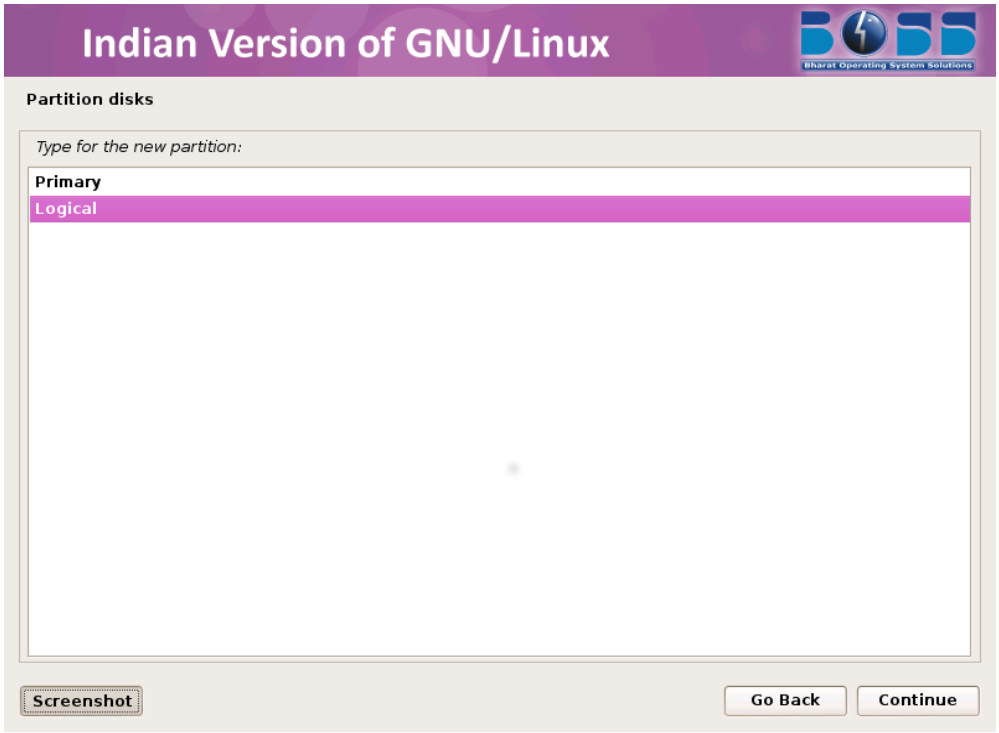
6. Now you have done resizing. You will get some free space to install BOSS GNU/Linux. Click on free space.
7. Create new partition for BOSS GNU/Linux by clicking “Create a new partition”.


Indian Version of GNU/Linux
Partition disks
This is an overview of your currently configured partitions and mount points. Select a partition to modify its settings (file system, mount point, etc.), a free space to create partitions, or a device to initialize its partition table.
Guided partitioning
Configure software RAID
Configure the Logical Volume Manager
Configure encrypted volumes
SCSI1 (0,0,0) (sda) - 500.1 GB ATA WDC WD5000BPVT-7
> #1 primary 102.9 MB B ntfs
> #2 primary 90.0 GB ntfs
> pri/log 126.9 GB FREE SPACE
> #5 logical 53.1 GB ext4
> #6 logical 2.0 GB F swap swap
> #7 logical 50.0 GB ext3
> #8 logical 15.0 GB ext3
> #9 logical 80.0 GB ext4
> #12 logical 20.0 GB ext4
> #10 logical 13.0 GB ext4
> #11 logical 20.0 GB ext4
Screenshot
Help
Go Back
Continue

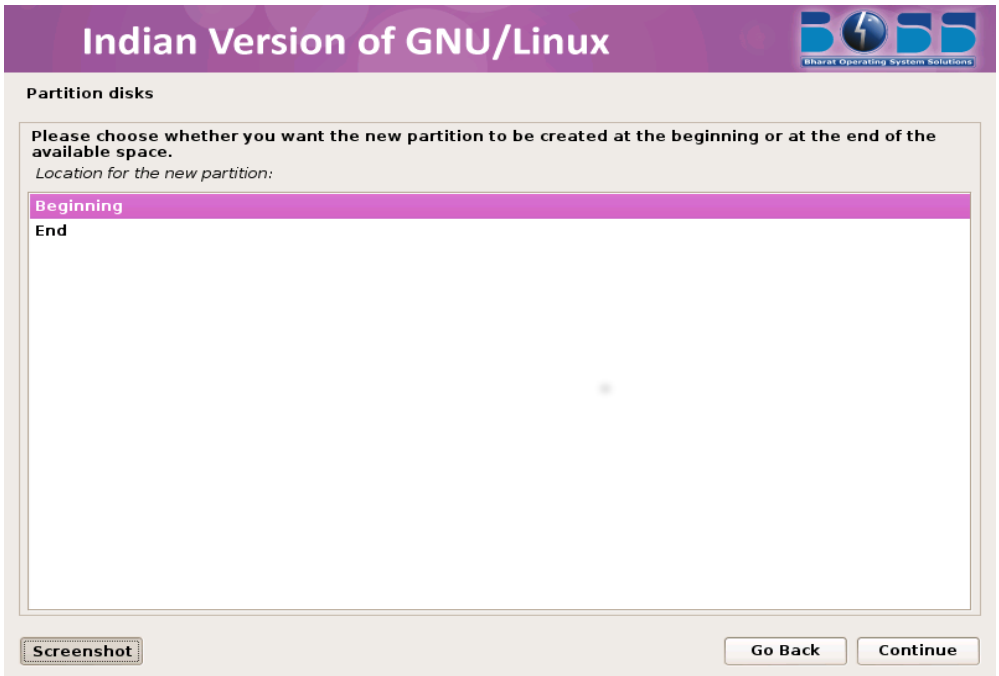
8. Give partition size for installing BOSS GNU/Linux. It should be minimum 5.0 GB.


Indian Version of GNU/Linux
Partition disks
The maximum size for this partition is 112.0 GB.
Hint: "max" can be used as a shortcut to specify the maximum size, or enter a percentage (e.g. "20%") to use that percentage of the maximum size.
New partition size:
100 GB
Screenshot
Go Back
Continue

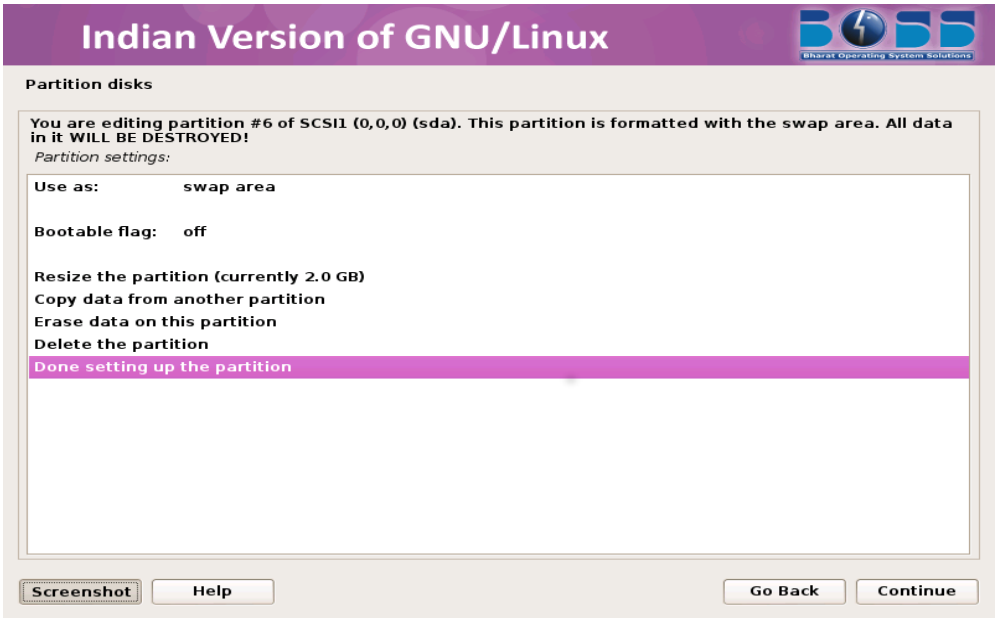
9. Select the type of partition.



10. Specify whether the partition should be at the beginning or end.

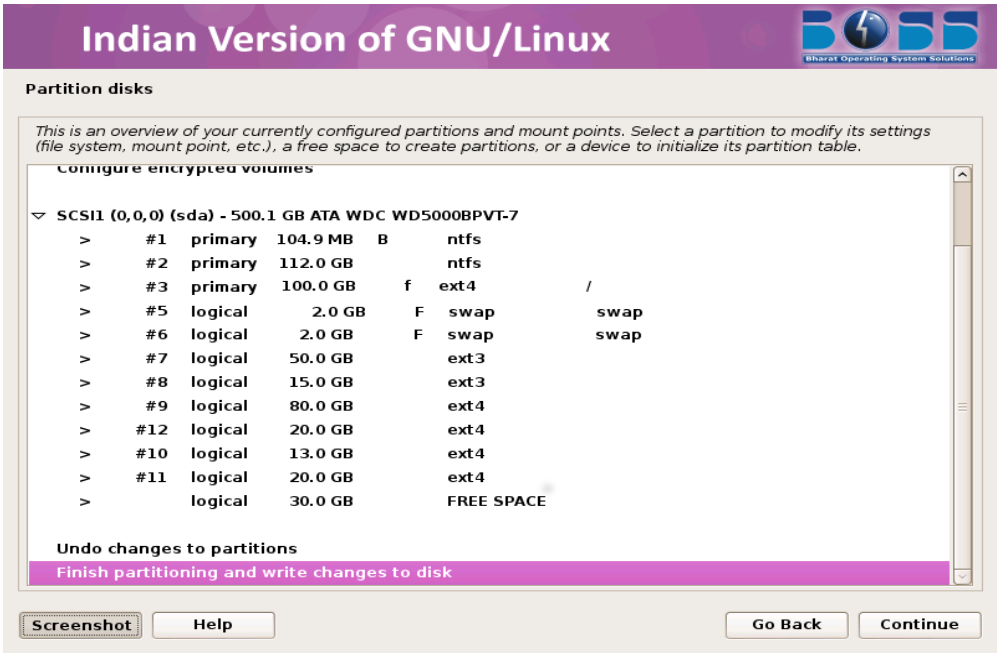

Indian Version of GNU/Linux
Partition disks
Please choose whether you want the new partition to be created at the beginning or at the end of the available space.
Location for the new partition:
Beginning
End
Screenshot
Go Back
Continue

11. Partition setting is covered. Click “Done setting up the partition” and click “Continue”.

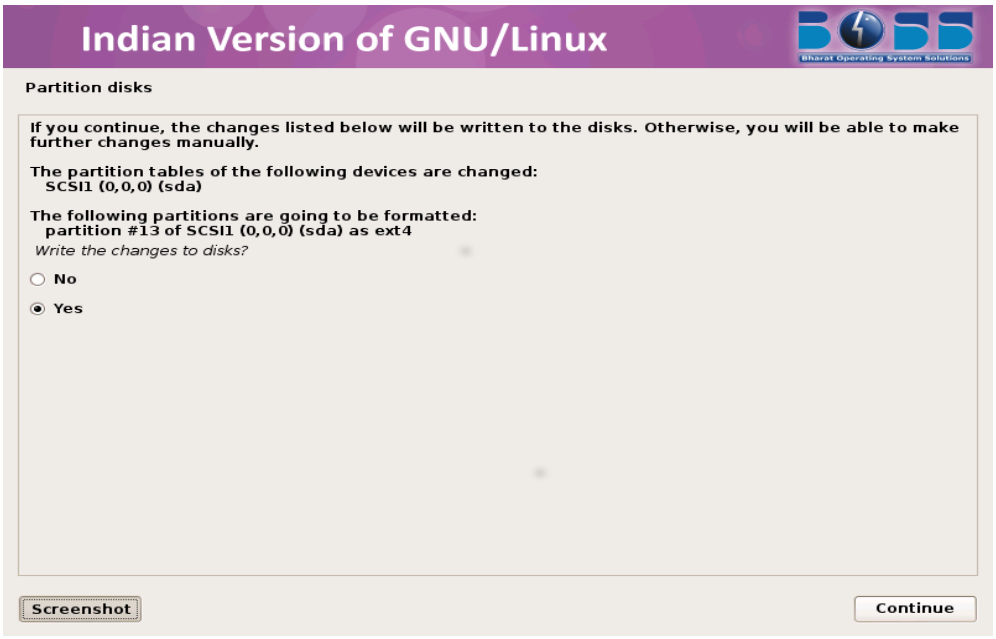

Indian Version of GNU/Linux
Partition disks
You are editing partition #6 of SCSI1 (0,0,0) (sda). This partition is formatted with the swap area. All data in it WILL BE DESTROYED!
Partition settings:
Use as: swap area
Bootable flag: off
Resize the partition (currently 2.0 GB)
Copy data from another partition
Erase data on this partition
Delete the partition
Done setting up the partition
Screenshot
Help
Go Back
Continue

12. After selecting the partition for the “/”, you need to select a partition for the “swap” space. If you are already having Linux installed on your system then you will be having a swap space in your system. If so no need of another swap space. The swap should be double the RAM size. If there is no swap then create a new swap space by following the steps 8 to 15 in “Creating a new partition” section.

13. Finish the partitioning process.


Indian Version of GNU/Linux
Partition disks
This is an overview of your currently configured partitions and mount points. Select a partition to modify its settings (file system, mount point, etc.), a free space to create partitions, or a device to initialize its partition table.
Configure encrypted volumes
SCSI1 (0,0,0) (sda) - 500.1 GB ATA WDC WD5000BPVT-7
> #1 primary 104.9 MB B ntfs
> #2 primary 112.0 GB ntfs
> #3 primary 100.0 GB f ext4 /
> #5 logical 2.0 GB F swap swap
> #6 logical 2.0 GB F swap swap
> #7 logical 50.0 GB ext3
> #8 logical 15.0 GB ext3
> #9 logical 80.0 GB ext4
> #12 logical 20.0 GB ext4
> #10 logical 13.0 GB ext4
> #11 logical 20.0 GB ext4
> logical 30.0 GB FREE SPACE
Undo changes to partitions
Finish partitioning and write changes to disk
Screenshot
Help
Go Back
Continue

14. After all the partitions are allocated, you need to write the changes to disk. For this select “Yes” in in the following screen and then click “Continue”.


Indian Version of GNU/Linux
Partition disks
If you continue, the changes listed below will be written to the disks. Otherwise, you will be able to make further changes manually.
The partition tables of the following devices are changed:
SCSI1 (0,0,0) (sda)
The following partitions are going to be formatted:
partition #13 of SCSI1 (0,0,0) (sda) as ext4
Write the changes to disks?
No
Yes
Screenshot
Continue

2.8 Installing the Base System

BOSS GNU/Linux is ready to install the packages into your system now.

2.9 Set the Root Password

Every Linux uses a special account named root for system administration. The root account on every Linux system is only limited by SELinux. It is not subject to any other normal account restrictions. As the system owner or administrator, you may sometimes require unrestricted access to configure or modify the system. In those cases, use the **root** account. \

> *Avoid logging in to BOSS as root when possible.*
> *Any administration tools which require root privileges will prompt you for the password.*

The **root** account may potentially control any part of the system, use the following guidelines to create a good password:

- Use a combination of uppercase letters, lowercase letters, numbers, punctuation and other characters.
- Do not use a word or name. Obscuring the word or name with substitute characters is not effective.

- Do not use the same password for more than one system.

The following are examples of good passwords:

- f9*@1Ls99A
- HL8$391%%rb
- Iwtb,10^th

Enter the root password into the **Root Password** field. Type the same password into the **Confirm** field to ensure that it is set correctly.

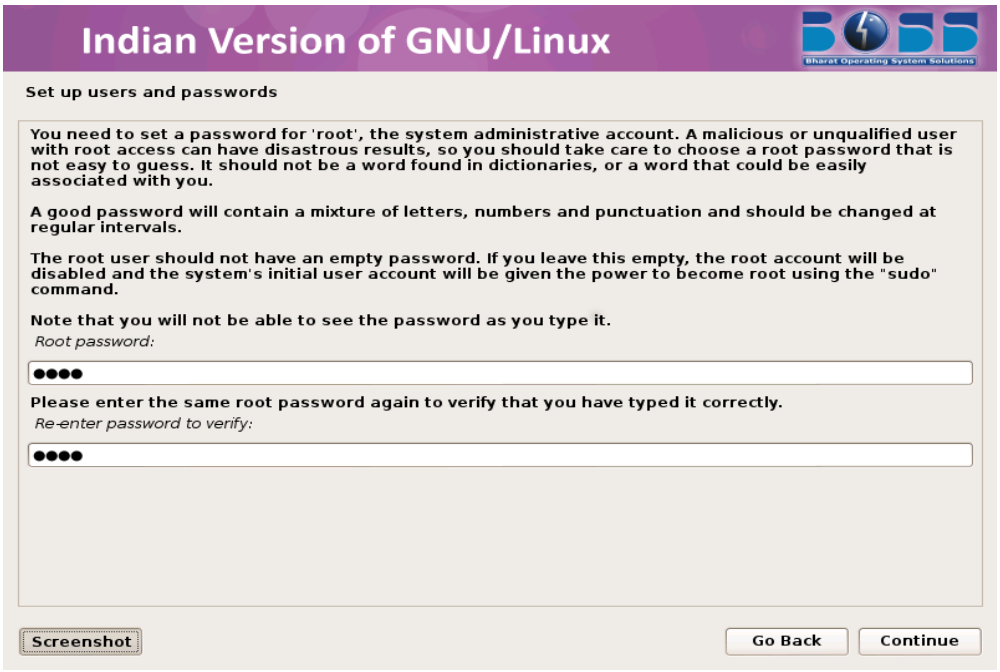

Indian Version of GNU/Linux
Set up users and passwords
You need to set a password for 'root', the system administrative account. A malicious or unqualified user with root access can have disastrous results, so you should take care to choose a root password that is not easy to guess. It should not be a word found in dictionaries, or a word that could be easily associated with you.
A good password will contain a mixture of letters, numbers and punctuation and should be changed at regular intervals.
The root user should not have an empty password. If you leave this empty, the root account will be disabled and the system's initial user account will be given the power to become root using the "sudo" command.
Note that you will not be able to see the password as you type it.
Root password:
Please enter the same root password again to verify that you have typed it correctly.
Re-enter password to verify:
Screenshot
Go Back
Continue

Figure 7. Set Root Password

2.10 Create User Account

Next step is to create a user account and setting password for the user. You can use this user account for logging into BOSS GNU/Linux. And this user will be used for auto login to BOSS GNU/Linux after certain time period.

The screen shots are as follows:

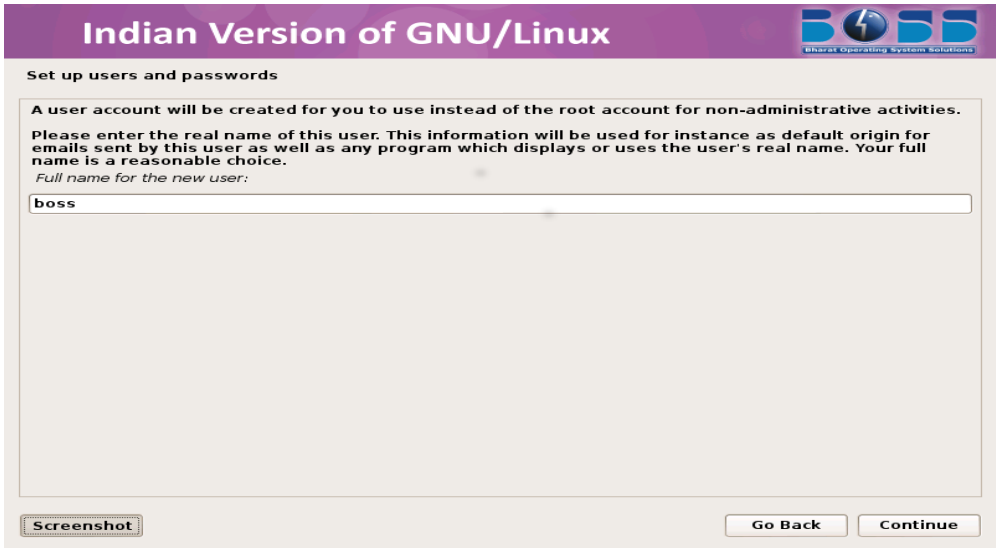

Indian Version of GNU/Linux
Set up users and passwords
A user account will be created for you to use instead of the root account for non-administrative activities.
Please enter the real name of this user. This information will be used for instance as default origin for emails sent by this user as well as any program which displays or uses the user's real name. Your full name is a reasonable choice.
Full name for the new user:
boss
Screenshot
Go Back
Continue

Figure 8. Set up user account

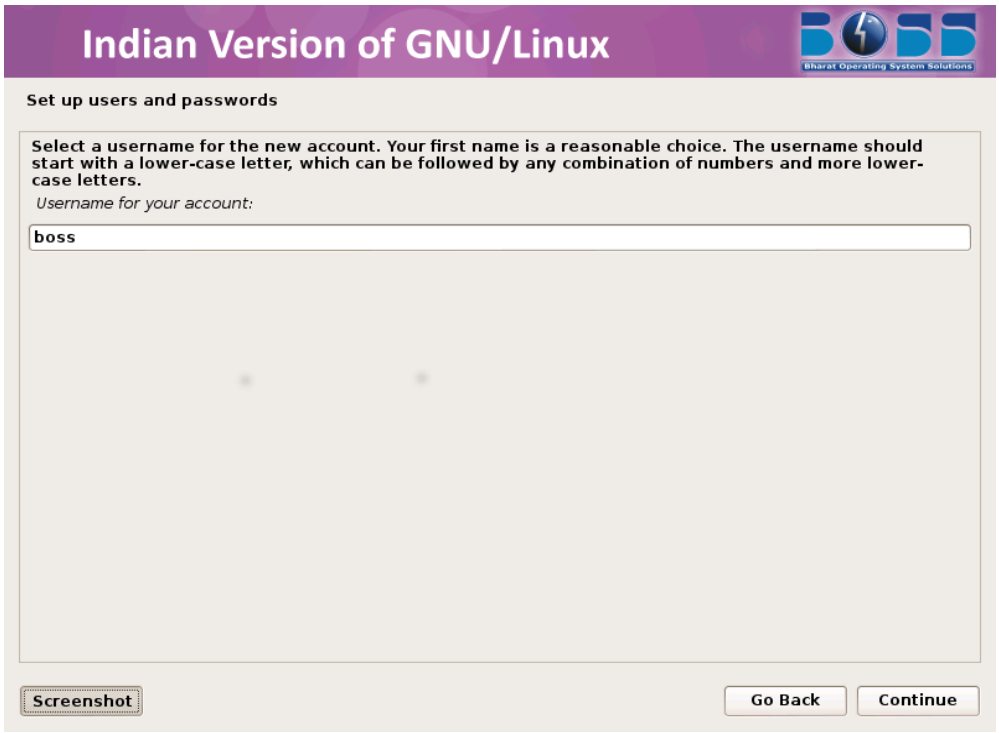

Indian Version of GNU/Linux
Set up users and passwords
Select a username for the new account. Your first name is a reasonable choice. The username should start with a lower-case letter, which can be followed by any combination of numbers and more lower-case letters.
Username for your account:
boss
Screenshot
Go Back
Continue

Figure 8.1 Set up user account's username

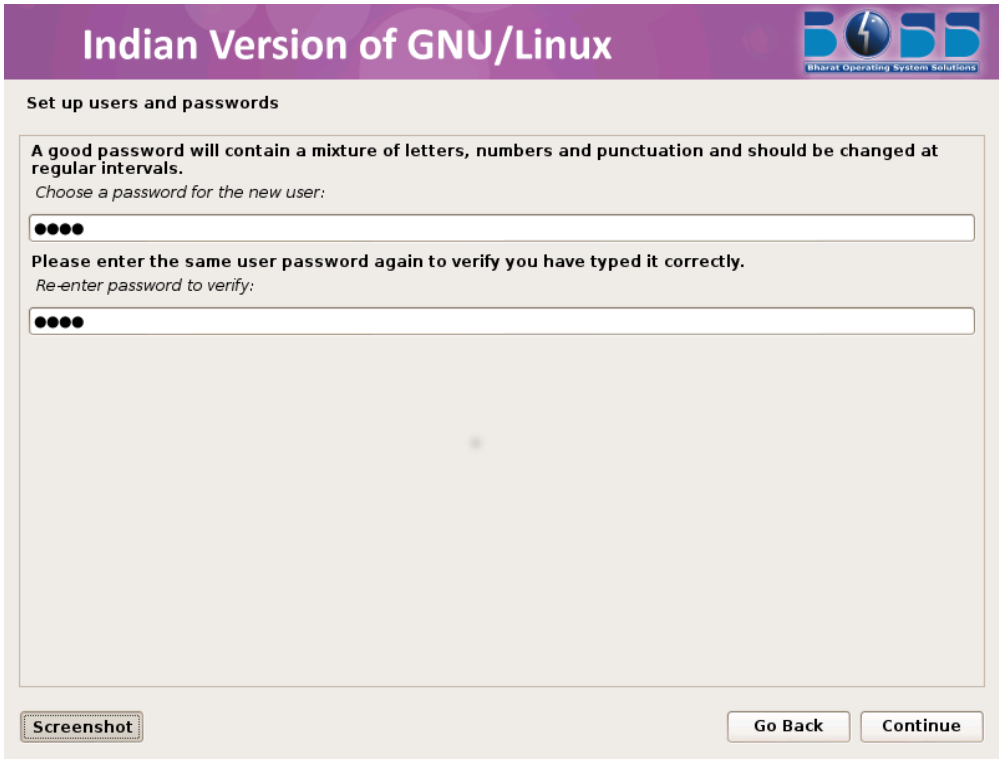

Indian Version of GNU/Linux
Set up users and passwords
A good password will contain a mixture of letters, numbers and punctuation and should be changed at regular intervals.
Choose a password for the new user:
Please enter the same user password again to verify you have typed it correctly.
Re-enter password to verify:
Screenshot
Go Back
Continue

Figure 8.2 Set up user account's password

2.11 Software Selection

The first step is to select the pack

ages to be installed. Here BOSS GNU/Linux provides four categories of packages with a DVD.

Desktop Environment: This installs the GNOME, Office, Games, Editors, Thunderbird mail client etc. This option will be enabled by default.

Print Server: This installs the printer related packages.

Laptop: This installs the laptop related tools like wireless-tools etc.

Standard System: This options also will be enabled by default, as this includes all the standard packages for a system to work properly and some additional packages. BOSS GNU/Linux recommends not to disable this option.

In the listed options it is very much needed to set the **Standard System always** selected., since it installs the basic set of Linux. And along with that it is highly recommended to select the Desktop Environment for the user to have Graphical User interface.

3. GNOME Desktop

GNOME is a Graphical User Interface that has many applications designed to help you in your daily work.

3.1 Logging In and Selecting a Desktop

To start a normal login, just enter your username and password.

System

Performs a system action, such as shutting down the computer or starting different login actions.

3.1.1 Locking Your Screen

To lock the screen use the keyboard shortcut *Ctrl*+ *Alt*+*L*.

3.2 Logging Out

When you are finished using the computer, you can log out and leave the system running or

restart or shut down the computer. If your system provides power management, you can also suspend the computer, making the next system start much faster than a complete boot.

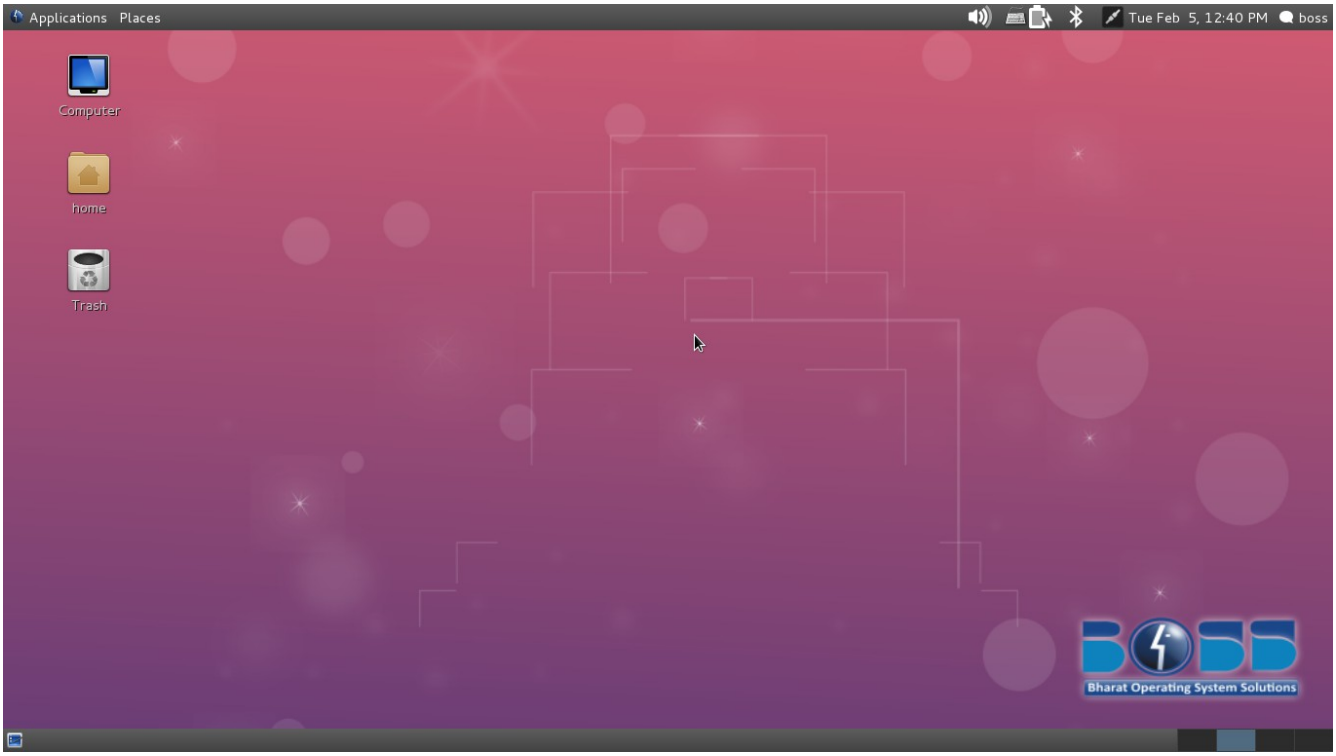
To log out and leave the system running, do one of the following:

•Select **System -> Log Out....**

•Use the keyboard shortcut that is defined in the GNOME keyboard shortcuts. Usually, to log out with confirmation, this is *Ctrl+Alt+Del*.

3.3 Desktop Components

The main components of the desktop are the icons on the desktop and the panel at the top and bottom of the screen.



3.3.1 Desktop Icons

The desktop has the following icons by default:

Trash

Contains files and folders that have been deleted.

Computer

Displays information about hardware, network status, operating system, hard disks, common folders, and removable devices.

Home

Displays the files and folders in the home folder.

3.3.2 Panel

The panel is a bar, typically located at the top and bottom of the screen. It is designed to provide information about running applications or the system and easy access to some applications. If you hold your pointer over an icon on the panel, a short description is displayed.

Top Panel

The top panel typically consists of the following items:

Menu Bar

By default, Menu Bar appears at the left end of the panel. The Menu Bar has a well-ordered structure for accessing the main applications. It also contains menu items for major functions like logging out or searching for applications.

The following icons by default appears in the right side of the top panel

Notification Area

The notification icons like Update Manager, SCIM appears in the notification area.

Clock

The clock icon displays the current date and time.

Volume Control

The Volume Control icon is useful for controlling the speaker volume.

Window Selector

This icon when clicked displays the applications running on different windows.

Bottom Panel

The bottom panel consists of the following items:

Show Desktop

This icon appears at the left side of the bottom panel. Click that icon to hide all the windows and show the desktop.

Window List

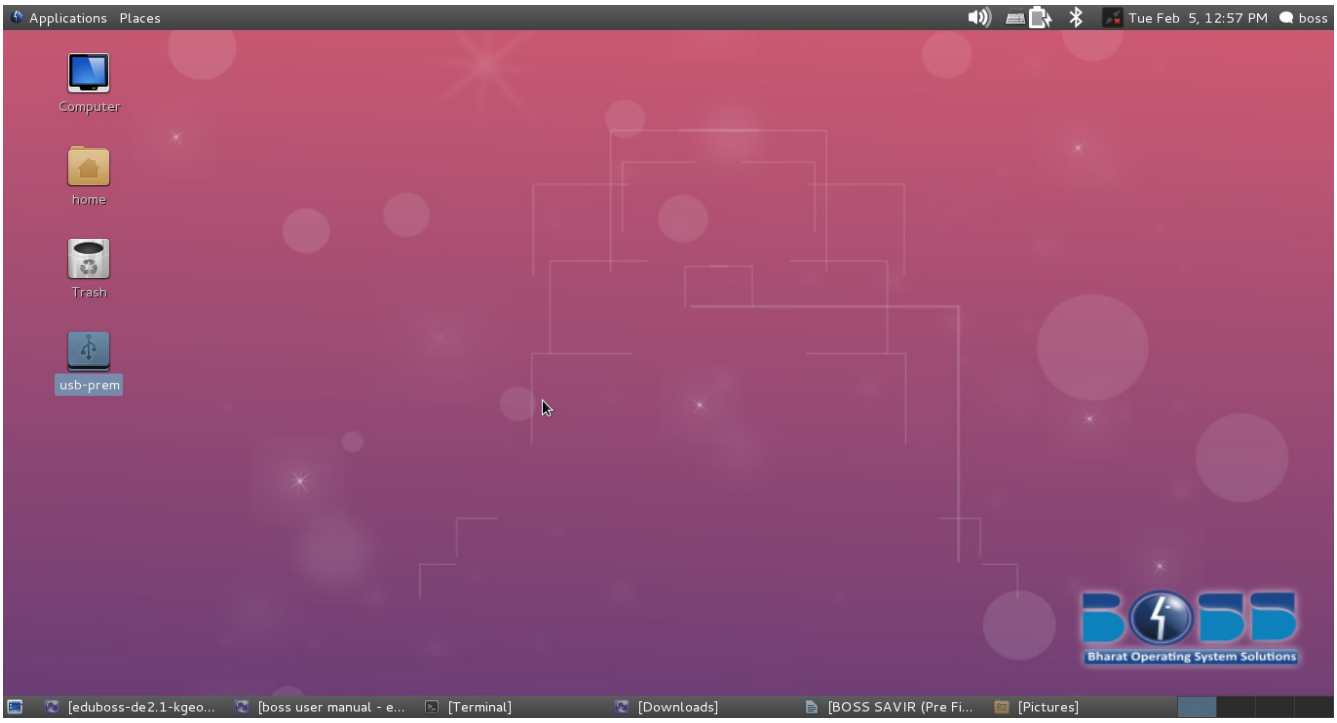
The Window List is located next to the “Show Desktop” icon. By default, all started applications and open windows are displayed in the Window List, which allows you to access any application regardless of the currently active desktop. If you click a window title in the Window List, the application is moved to the foreground. If it is already in the foreground, clicking minimizes the application.

Workspace Switcher

By default, the right end of the bottom panel has an icon which shows your different desktops. These virtual desktops enable you to organize your work. If you use many programs simultaneously, you might want to run some programs in one desktop and other programs in the other desktop. To switch between desktops, click the desktop symbol in the panel.

3.4 Handling Removable Media

If you insert or connect removable media to your computer (such as CD-ROMs or USB sticks), these are usually mounted automatically.



3.4.1 Removing Media Safely

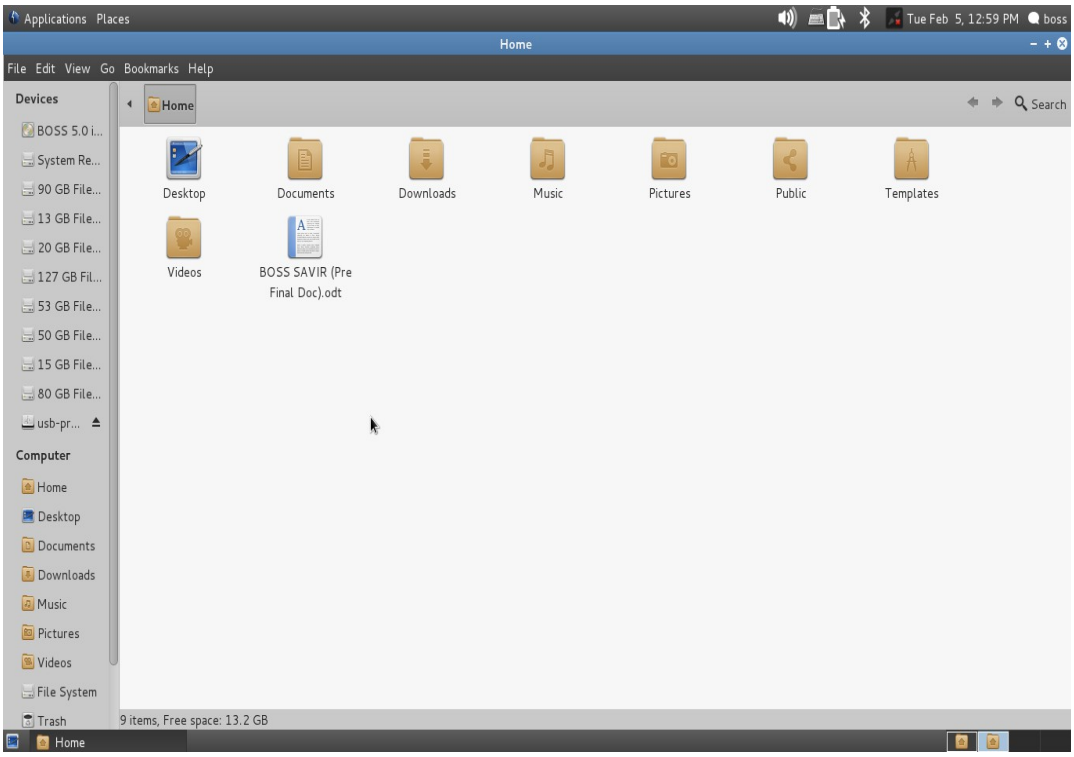
If you want to remove or disconnect a medium from your computer, make sure that the data on the medium is currently not accessed by any application or user. Otherwise, you risk a loss of data.

To safely remove the medium right-click the medium to remove and select “Safely Remove” or “Eject”. “Safely Remove” unmounts the medium after which you can disconnect the medium from your computer. “Eject” automatically opens the CD or DVD drive of your computer.

3.5 Managing Trash

The trash is a directory for files marked for deletion. Drag icons from the file manager or the desktop to the trash icon by keeping the left mouse button pressed. Then release to drop them there. Alternatively, right-click an icon and select “Move to Trash” from the menu. Double-click the trash icon to view its contents. You can retrieve an item from the trash if desired.

Files removed with *Shift+Delete* are not moved to the trash bin, but deleted completely. To delete the files in the trash bin completely, right-click the trash bin icon then click “Empty Trash”.



3.6 Managing Folders and Files with Nautilus

Nautilus is a file manager. The following sections cover using Nautilus for file management.

3.6.1 File Manager Functionality

The Nautilus file manager provides a simple and integrated way to manage your files and applications. You can use the file manager to do the following:

•Create folders and documents

•Display your files and folders

•Search and manage your files

•Run scripts and launch applications

•Customize the appearance of files and folders

•Open special locations on your computer

•Write data to a CD or DVD

•Install and remove fonts

The file manager lets you organize your files into folders. Folders can contain files and may also contain other folders. Using folders can help you find your files more easily.

Nautilus also manages the desktop. The desktop lies behind all other visible items on your screen. The desktop is an active component of the way you use your computer.

Every user has a Home Folder. The Home Folder contains all of the user's files. The desktop is another folder. The desktop contains special icons allowing easy access to the users Home Folder, Trash, and also removable media such as floppy disks, CDs and USB flash drives.

Nautilus is always running while you are using GNOME. To open a new Nautilus window, double-click on an appropriate icon on the desktop such as “Home” or “Computer”, or choose an item from “Places” menu on the top panel.

In GNOME many things are files, such as word processor documents, spreadsheets, photos, movies, and music.

3.6.2 File Manager Presentation

Nautilus provides two modes in which you can interact with your filesystem: spatial and browser mode. You may decide which method you prefer and set Nautilus to always use this by selecting (deselecting) “Always open in browser windows” in the “Behavior” tab of the Nautilus preferences dialog.

The following explains the difference between the two modes:

Browser mode: browse your files and folders

The file manager window represents a browser, which can display any location. Opening a folder updates the current file manager window to show the contents of the new folder.

The browser window displays a toolbar with common actions and locations, a location bar that shows the current location in the hierarchy of folders, and a sidebar that can hold different kinds of information.

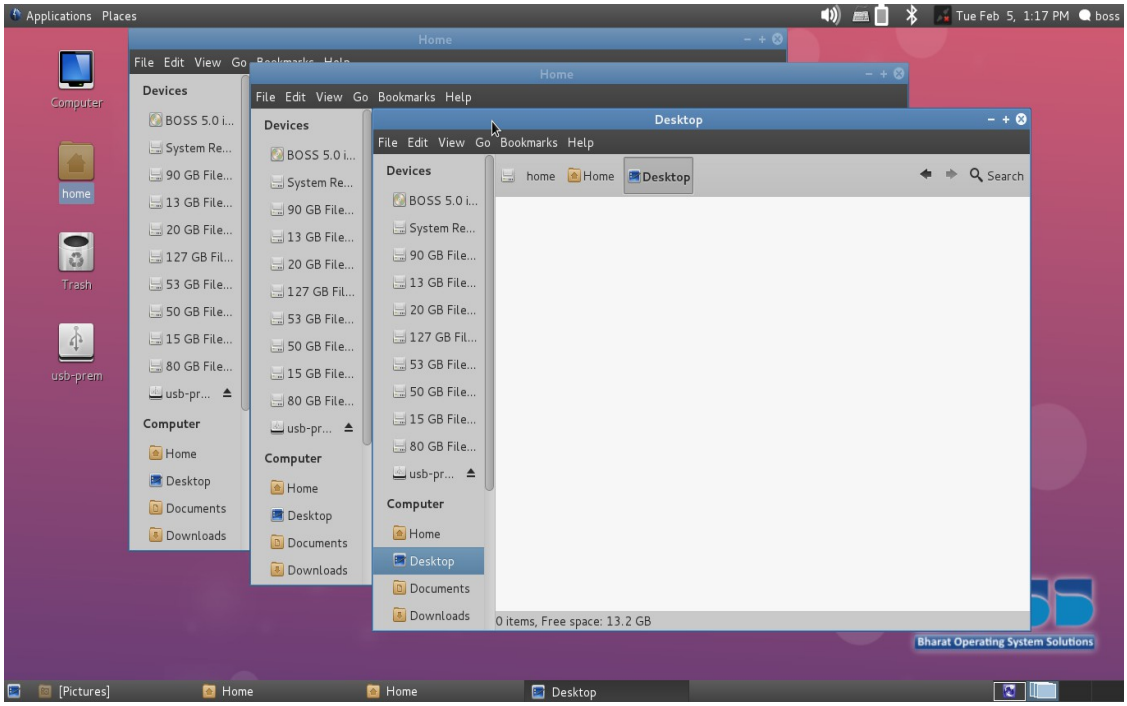
In Browser Mode, you typically have fewer file manager windows open at a time.

Spatial mode: navigate your files and folders as objects

The file manager window represents a particular folder. Opening a folder opens the new window for that folder. Each time you open a particular folder, you will find its window

displayed in the same place on the screen and the same size as the last time you viewed it (this is the reason for the name 'spatial mode').

Using spatial mode may lead to more open file manager windows on the screen.



3.6.3 File Browser Window Components

The nautilus file browser window consists of the following elements:

Menu Bar

You can also open a popup menu from file manager windows. To open this popup menu right-click in a file manager window. The items in this menu depend on where you right-click. For example, when you right-click on a file or folder, you can choose items related to the file or folder. When you right-click on the background of a view pane, you can choose items related to the display of items in the view pane.

Toolbar

Contains buttons that you use to perform tasks in the file manager.

•Back - returns to the previously visited location. The adjacent drop down list also contains a list of the most recently visited locations to allow you to return to them faster.

•Forward - performs the opposite function to the “Back” toolbar item. If you have previously navigated back in time then this button returns you to the present.

•Up - moves up one level to the parent of the current folder.

•Reload - refreshes the contents of the current folder.

•Home - opens your Home Folder.

•Computer - opens your Computer folder.

•Search - opens the search bar.

Location Bar

The location bar is a very powerful tool for navigating your computer.

•Zoom buttons - Enable you to change the size of items in the view pane.

•View as drop-down list - Enables you to choose how to show items in your view pane.

Side Pane

Performs the following functions:

•Shows information about the current file or folder.

•Enables you to navigate through your files.

To display the side pane, choose **View -> Side Pane**. The side pane contains a drop-down list that enables you to choose what to show in the side pane. You can choose from the following options:

•Places - Displays places of particular interest.

•Information - Displays the icon and information about the current folder.

•Tree - Displays a hierarchical representation of your file system. You can use the Tree to navigate through your files.

•History - Contains a history list of files, folders, FTP sites, and URIs that you have recently visited.

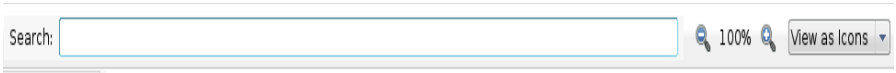
•Notes - Enables you to add notes to your files and folders.

•Emblems - Contains emblems that you can add to a file or folder.

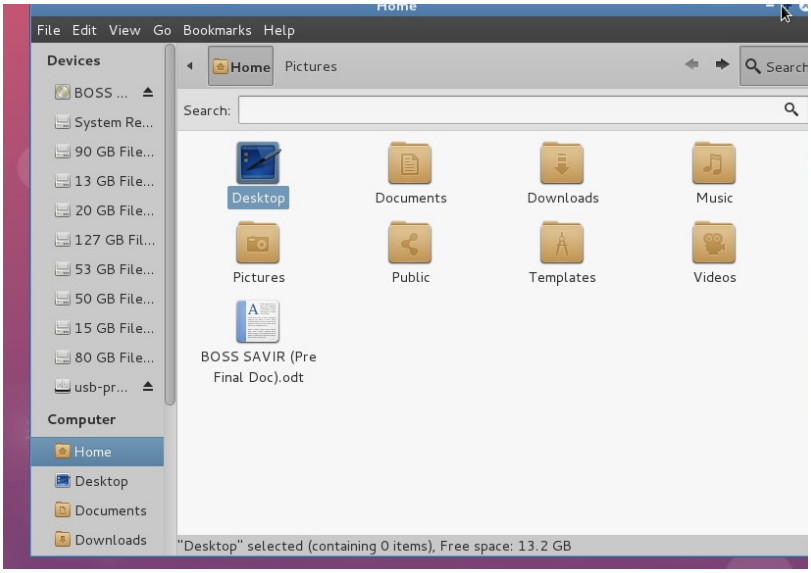
To close the side pane, click on the “X” button at the top right of the side pane.

3.6.4 Searching For Files

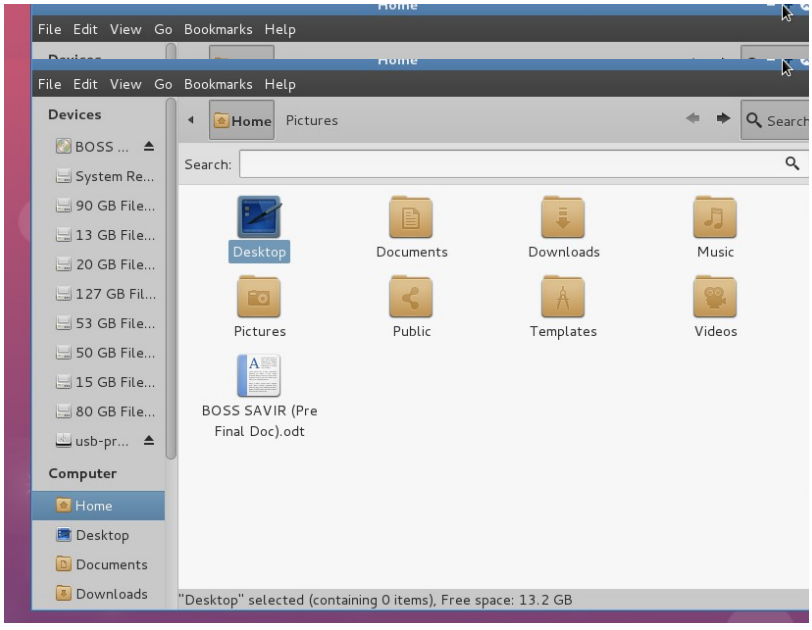
The Nautilus file manager includes an easy and simple to use way to search for your files and folders. To begin a search press *Ctrl+F* or select the “Search” toolbar button.



Enter characters present in the name or contents of the file or folder you wish to find and press *Enter*. The results of your search should appear in the view pane.



If you are not happy with your search you can refine it by adding additional conditions. This allows you to restrict the search to a specific file type or location. To add search conditions click the “+” icon.



Saving Searches

Nautilus searches can also be saved for future use. Once saved, searches may be reopened later.

Saved searches behave exactly like regular folders, for example you can open, move or delete files from within a saved search.

3.6.5 Using Views to Display Your Files and Folders

The file manager includes views that enable you to show the contents of your folders in different ways, icon view, and list view.

•Icon view - Shows the items in the folder as icons.

•List view - Shows the items in the folder as a list.

3.6.6 Moving a File or Folder

You can move a file or folder by dragging it with the mouse, or with the cut and paste commands. The following sections describe these two methods.

Drag to the New Location

To drag a file or folder to a new location, perform the following steps:

1. Open two file manager windows:

•The window containing the item you want to move.

•The window you want to move it to, or the window containing the folder you want to move it to.

1. Drag the file or folder that you want to move to the new location. If the new location is a window, drop it anywhere in the window. If the new location is a folder icon, drop the item you are dragging on the folder.

To move the file or folder to a folder that is one level below the current location, do not open a new window. Instead, drag the file or folder to the new location in the same window.

Cut and Paste to the new location

You can cut a file or folder and paste the file or folder into another folder, as follows:

1. Select the file or folder that you want to move, then choose **Edit -> Cut**.
2. Open the folder to which you want to move the file or folder, then choose **Edit ->**

Paste.

3.6.7 Copying a File or Folder

You can copy a file or folder by dragging it with the mouse, or with the copy and paste commands. The following sections describe these two methods.

Drag to the New Location

To copy a file or folder, perform the following steps:

Open two file manager windows:

•The window containing the item you want to move.

•The window you want to move it to, or the window containing the folder you want to move it to.

Drag the file or folder that you want to move to the new location. If the new location is a window, drop it anywhere in the window. If the new location is a folder icon, drop the item you are dragging on the folder.

To copy the file or folder to a folder that is one level below the current location, do not open a new window. Instead, grab the file or folder, then press-and-hold Ctrl. Drag the file or folder to the new location in the same window.

Copy and Paste to the New Location

You can copy a file or folder and paste the file or folder into another folder, as follows:

1. Select the file or folder that you want to copy, then choose **Edit -> Copy**.
2. Open the folder to which you want to copy the file or folder, then choose **Edit -> Paste**.

3.6.8 Duplicating a File or Folder

To create a copy of a file or folder in the current folder, perform the following steps:

1. Select the file or folder that you want to duplicate.
2. Choose **Edit -> Duplicate**.

   A copy of the file or folder appears in the current folder.

3.6.9 Creating a Folder

To create a folder, perform the following steps:

1. Open the folder where you want to create the new folder.
2. Choose **File -> Create Folde**r. Alternatively, right-click on the background of the window, then choose “Create Folder”.
3. An untitled folder is added to the location. The name of the folder is selected.
4. Type a name for the folder, then press *Enter*.

3.6.10 Renaming a File or Folder

To rename a file or folder perform the following steps:

1. Select the file or folder that you want to rename.
2. Choose **Edit -> Rename**. Alternatively, right-click on the file or folder, then choose “Rename...”.
3. The name of the file or folder is selected.
4. Type a new name for the file or folder, then press *Enter*.

3.6.11 Moving a File or Folder to Trash

To move a file or folder to Trash perform the following steps:

1. Select the file or folder that you want to move to Trash.
2. Choose **Edit -> Move to Trash**. Alternatively, right-click on the file or folder, then choose “Move to Trash”.

Alternatively, you can drag the file or folder to the Trash object on the desktop.

When you move a file or folder from a removable media to Trash, the file or folder is stored in a Trash location on the removable media. To remove the file or folder permanently from the removable media, you must empty Trash.

3.6.12 Deleting a File or Folder

When you delete a file or folder, the file or folder is not moved to Trash, but is deleted from your filesystem immediately. The “Delete” menu item is only available if you select the “Include a Delete command that bypasses Trash” option in the **Edit -> Preferences** dialog.

To delete a file or folder perform the following steps:

1. Select the file or folder that you want to delete.
2. Choose **Edit -> Delete**. Alternatively, right-click on the file or folder, then choose “Delete”.

Alternatively, select the file or folder you want to delete, and press *Shift+Del*

3.6.13 Creating a Symbolic Link to a File or Folder

A symbolic link is a special type of file that points to another file or folder. When you perform an action on a symbolic link, the action is performed on the file or folder to which the symbolic link points. However, when you delete a symbolic link, you delete the link file, not the file to which the symbolic link points.

To create a symbolic link to a file or folder, select the file or folder to which you want to create a link. Choose **Edit -> Make Link**. A link to the file or folder is added to the current folder.

Alternatively, grab the item to which you want to create a link, then press-and-hold *Ctrl+Shift*. Drag the item to the location where you want to place the link.

By default, the file manager adds an emblem to symbolic links.

The permissions of a symbolic link are determined by the file or folder to which a symbolic link points.

3.6.14 File Permissions

Permissions are settings assigned to each file and folder that determine what type of access users can have to the file or folder. For example, you can determine whether other users can read and edit a file that belongs to you, or only have access to read it but not make changes to it.

Each file belongs to a particular user, and is associated with a group that the owner belongs to. The super user "root" has the ability to access any file on the system.

You can set permissions for three categories of users:

Owner - The user that created the file or folder.

Group - A group of users to which the owner belongs.

Others - All other users not already included.

For each category of user, different permissions can be set. These behave differently for files and folders, as follows:

read

•Files can be opened

•Directory contents can be displayed

write

•Files can be edited or deleted

•Directory contents can be modified

execute

•Executable files can be run as a program

•Directories can be entered

3.6.15 Changing Permissions

Changing Permissions for a File

To change the permissions of a file, perform the following steps:

1. Select the file that you want to change.
2. Choose **File -> Properties**. The properties window for the item is displayed.
3. Click on the “Permissions” tab.
4. To change the file's group, choose from the groups the user belongs to in the drop-down selector.
5. For each of the owner, the group, and all other users, choose from these permissions for the file:

   None - No access to the file is possible(You can't set this for the owner).

   Read-only - The users can open a file to see its contents, but not make any changes.
6. Read and Write - Normal access to a file is possible: it can be opened and saved.
7. To allow a file to be run as a program, select “Execute”

Changing Permissions for a Folder

To change the permissions of a folder, perform the following steps:

1. Select the folder that you want to change.
2. Choose **File -> Properties**. The properties window for the item is displayed.

3. Click on the “Permissions” tab.
4. To change the folder's group, choose from the groups the user belongs to in the drop-down selector.
5. For each of the owner, the group, and all other users, choose from these folder access permissions:

   None - No access to the folder is possible (You can't set this for the owner.)

   List files only - The users can see the items in the folder, but not open any of them.

   Access files - Items in the folder can be opened and modified, provided their own permissions allow it.

   Create and delete files - The user can create new files and delete files in the folder, in addition to being able to access existing files.

To set permissions for all the items contained in a folder, set the “File Access” and “Execute” properties and click on “Apply permissions to enclosed files”.

3.6.16 Writing CDs or DVDs

Writing to a CD or DVD may be useful for backing up your important documents. To do this, your computer must have a CD or DVD writer.

A simple way to check what sort of CD or DVD drive your computer has is to choose **Places -> Computer** from the top panel menubar. If the icon for your CD drive has terms like "CD-RW" or "DVD(+-)R" in its label, then your computer is able to write discs.

You can start choosing files to burn to a disc at any time. The file manager provides a special folder for files and folders that you wish to write to a CD or DVD. From there you can easily write all of the content (which you place in this special folder) to a CD or DVD.

Creating Data Discs

To write a CD or DVD, perform the following steps:

1. Choose **Places -> CD/DVD Creator**. The file manager opens the CD/DVD Creator folder.

   In a File Browser window, this item is in the Go menu.
2. Drag the files and folders that you want to write to CD or DVD to the CD/DVD Creator folder.
3. Insert a writable CD or DVD into the CD/DVD writer device on your system.
4. Press the “Write to Disc” button, or choose **File -> Write to CD/DVD**. A Write to Disc dialog is displayed.
5. Use the Write to Disc dialog to specify how you want to write the CD

•Write disc to - Select the device to which you want to write the CD from the drop-down list. To create a CD image file, select the “File image” option. A CD image file is a normal file that contains all of the data in the same format as a CD, that you can write to a CD later.

•Disc name - Type a name for the CD in the text box.

•Data size - Shows the size of the data to be written to disc. The blank disk must be at least this size.

•Write speed - Select the speed at which you want to write the CD from the drop- down list.

Click on the “Write” button.

If you selected the “File image” option from the “Write disc to” drop-down list, “Choose a filename for the disc image” dialog is displayed. Use the dialog to specify the location where you want to save the disc image file. By default, disc image files have a .iso file extension.

A Writing disc dialog is displayed. This process takes some time. When the disc is written or when the disc image file is created, a message to indicate that the process is complete is displayed in the dialog.

Copying CDs or DVDs

You can create a copy of a CD or DVD, either to another disc or to an image file stored on your computer. To create a copy, perform the following steps:

1. Insert the disc you want to copy.
2. Choose **Places -> Computer** from the top panel menubar.
3. Right-click on the CD icon, and choose “Copy Disc”.
4. The Write to Disc dialog is displayed.

If you have only one drive with write capabilities, the process will first create a disc image file on your computer. It will then eject the original disk, and ask you to change it for a blank disk on which to write the copy.

Creating a Disc from an Image File

You can write a disc image to a CD or DVD. For example, you may have downloaded a disc image from the internet, or previously created one yourself. Disc images usually have a .iso file extension and are sometimes called iso files.

To write a disc image, right-click on the disc image file, then choose Write to Disc from the popup menu.

3.6.17 Accessing a Remote Server

You can use the file manager to access a remote server, be it an FTP site, a Windows share, or an SSH server.

To access a remote server, choose **File -> Connect to Server....** You may also access this dialog from the menu bar by choosing **Places -> Connect to Server....**

In the “Connect to Server” dialog, you may click on the “Browse Network” button to close this dialog and view services available on your network in a Nautilus window.

To connect to a remote server, start by choosing the service type, then enter the server address.

If required by your server, you may provide the following optional information :

•Port - Port to connect to on the server. This should only be used if it is necessary to change the default port, you would normally leave this blank.

•Folder - Folder to open upon connecting to server.

•Name to use for connection - The designation of the connection as it will appear in the file manager.

If the server information is provided in the form of a URI, or you require a specialized connection, choose “Custom Location” as the service type.

Once you have filled in the information, click “Connect” button. When the connection succeeds, the contents of the site are displayed and you may drag and drop files to and from the remote server.

3.7 Finding Data on your Computer

The “Search for Files” application enables you to search for files on your system.

To start search choose **Places -> Search for Files...**

3.7.1 To Perform a Basic Search

To perform a basic search for a file on the system, perform the following steps:

1.Enter the search text in the “Name contains:” field. The search text can be a filename or partial filename, with or without wildcards, as shown in the following table:

Name Contains Text	Example	Result
Full or partial filename	myfile.txt	Search for Files searches for all files that contain the text myfile.txt in the filename.

Partial filename combined with wildcards (*, [,])	*.[ch]	Searches for all files that have extension .c or .h

2. In the “Look in folder:” field, select the folder or device from which you want Search for Files to begin the search.

3. Click “Find” to perform the search.

Search for Files searches in the directory that you specify and the subdirectories of the directory. Search for Files displays the results of the search in the Search results list box. If Search for Files does not find any files that match the search criteria, the application displays the message "No files found" in the Search results list box.

3.7.2 To Add Search Options

You can add additional options to search for a file on the system. To add search options, perform the following steps:

1. Click on the “Select more options” text.
2. Click on the “Available options:” drop-down list.
3. Select the search option that you want to apply.
4. Click “Add”.
5. Specify the required search information for the search option
6. Repeat the above steps for each search option that you want to apply.

To remove a search option from the current search, click on the “Remove” button next to the option.

To disable the search options from the current search, click on the “Select more options” text.

3.7.3 To Stop a Search

Click “Stop” to stop a search before Search for Files completes the search.

3.7.4 To Open a Displayed File

To open a file displayed in the Search results list box, perform one of the following steps:

•Right-click on the file, then choose “Open”.

•Double-click on the file.

•To open the folder that contains a file displayed in the Search results list box, right-click on the file, then choose “Open Folder”.

3.7.5 To Delete a Displayed File

To delete a file displayed in the Search results list box, right-click on the file, then choose “Move to Trash”.

3.7.6 To Save the Search Results

To save the results of the last search that Search for Files performed, right-click in the Search results list, then choose “Save Results As...”. Enter the name of the file to which you want to save the results, then click “Save”.

4. Customizing Desktop Settings

You can change the way your desktop looks and behaves to suit your own personal tastes and needs.

4.1 Changing Individual Desktop Elements

4.1.1 Creating New Desktop Objects

To create a new folder,

1. Right-click an empty space on the desktop.
2. From the popup menu, choose “Create Folder”.
3. An untitled folder appears on the desktop. Rename the folder.

To create a new file,

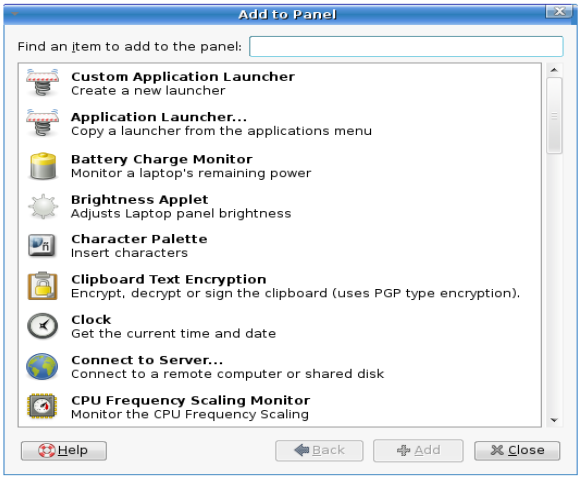
1. Right-click an empty space on the desktop.
2. From the popup menu, choose “Create Document”. From the sub menu choose “Empty File”.
3. A file with name “new file” appears on the desktop.

To change the properties, of the objects in the desktop right click the object and select “properties”. A dialog appears with five tabs where you can change the properties of the object such as permissions.

4.1.2 Changing Panel Elements

To add new elements to the panel,

1. Right click on the empty space on the panel and select “Add to Panel...”



2. Select the element you want to add to the panel. Then click “Add” button.
3. Now you can see that element on the panel.

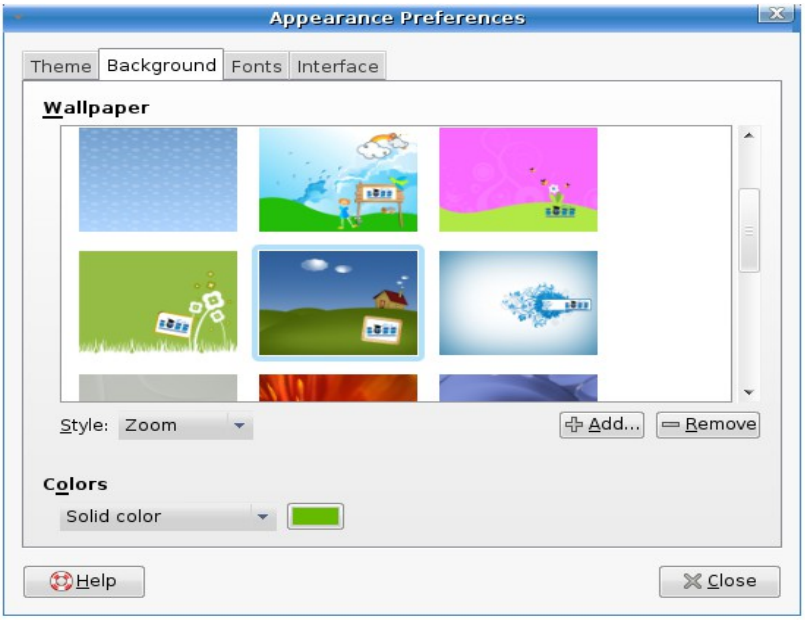
To remove an element from the panel right-click on the element you want to remove and select “Remove From Panel”.

4.2 Changing the Desktop Settings

You can change a variety of settings, such as the desktop background, screen saver, fonts, keyboard and mouse configuration, and sounds.

4.2.1 Changing the Desktop Background

To change the desktop background, right-click on the desktop and select “Change Desktop Background” or choose **System -> Preferences -> Appearance** and click **“Background”** tab.The following window appears.

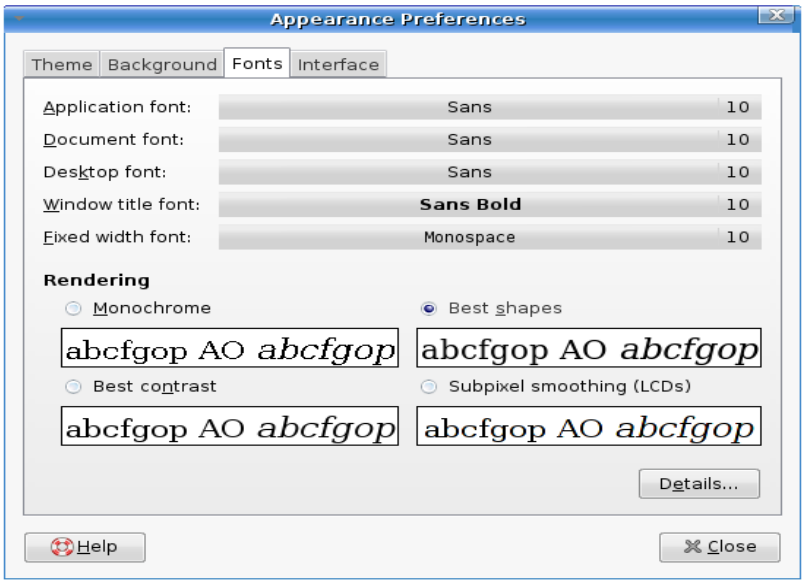


Select the wallpaper you like and click “Finish”. If you want to add wallpaper stored in another location click “Add WallPaper” button. Choose the location of the new wallpaper and click “Finish”.

4.2.2 Changing the Desktop Font

To change the desktop font, choose **System -> Preferences -> Appearance** and click **“Fonts”**

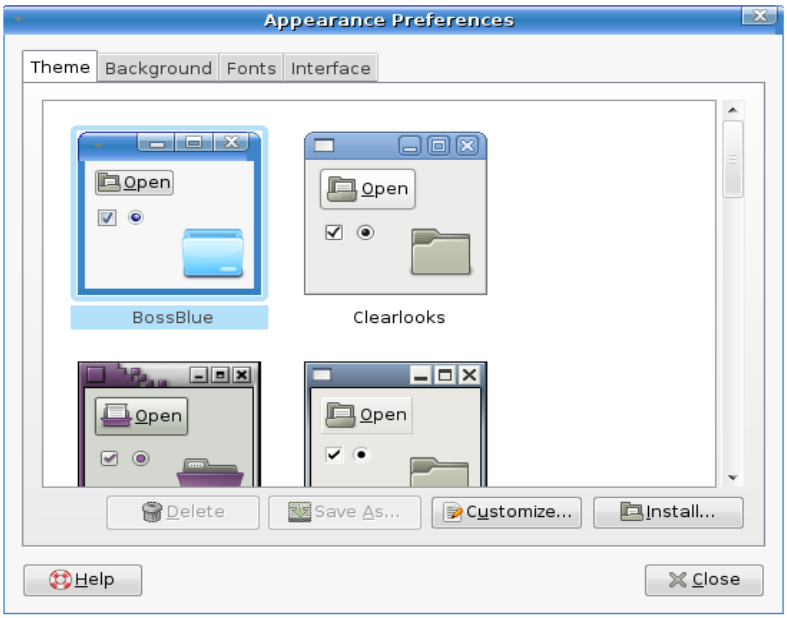
tab. A new window appears. In that select the “Desktop font” option.



Select the font and click “OK”.

4.2.3 Changing the Desktop Theme

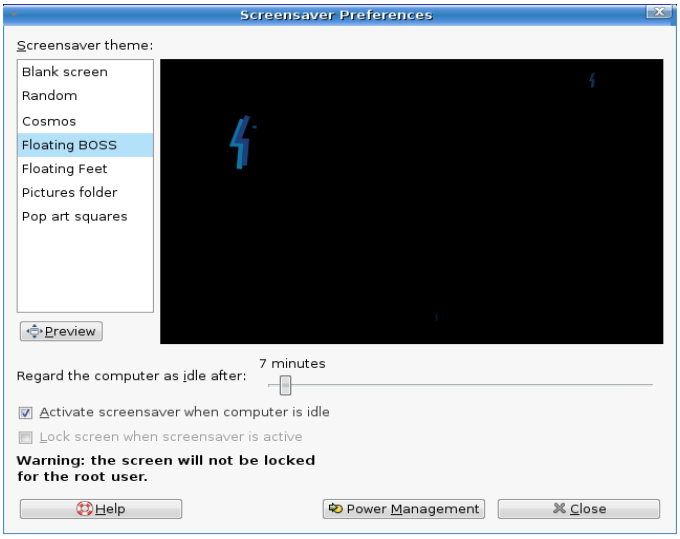
To change the desktop theme choose, **System -> Preferences -> Theme**. The following window appears.



Select the theme you want and click “close”.

4.2.4 Changing the Screen Saver

To select a screen saver choose **System -> Preferences -> Screensaver**. The following window appears.



Select the screen saver you want and click “close”.

4.3 gDesklets

gDesklets is a system for bringing mini programs (desklets), such as weather forecasts, news tickers, system information displays, or music player controls, onto your desktop, where they are sitting there in a symbiotic relationship of eye candy and usefulness. The possibilities are really endless and they are always there to serve you whenever you need them.

The small programs that run inside gDesklets are called desklets. Some of them include:

Clocks

Calendars

Weather

RSS feed aggregators

Controls for other applications (such as XMMS and Gaim)

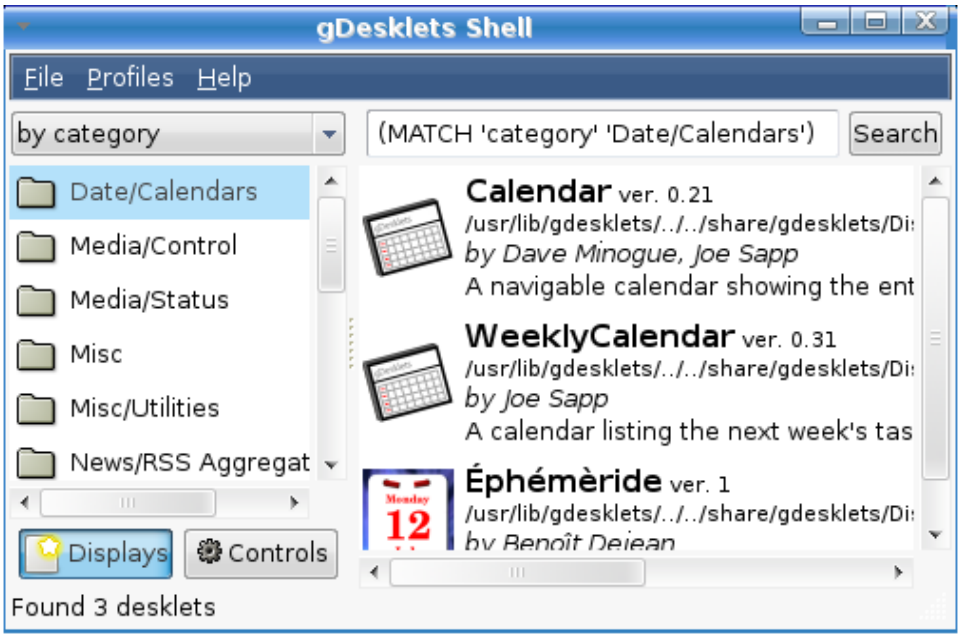
Animated toolbars

Desktop notes

System monitors

To start gDesklets choose **Applications -> Accessories -> gDesklets.**

The following window appears



- To place a desklet in the desktop, double-click the desklet. For example in the above window to place “Calendar” in the desktop double-click “Calendar”. Drag the mouse pointer to the desktop. The mouse pointer changes into a hand symbol. Click the left mouse button to place that desklet in the desktop.
- To configure the desklet right-click on that desklet and choose “Configure desklet”.
- To remove the desklet from the desktop place the mouse arrow above that desklet. Click the right-mouse button and select “Remove desklet”. A window appears. In that click “Delete”.
- To place the desklet in any other position in the desktop place the mouse arrow above that desklet. Click the right-mouse button and select “Move desklet”. The mouse pointer changes into hand symbol. Move the desklet to the position where you want to place it and then click the left mouse button.

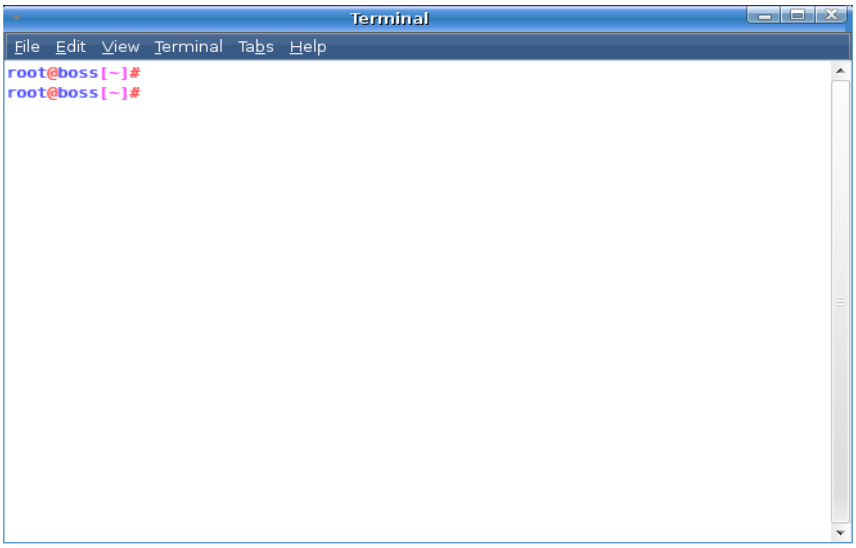
5. Linux Basics with BOSS GNU/Linux

This section covers the Linux basics, which helps you to work with BOSS GNU/Linux. This covers only the basics as this is not the Linux Guide. This just helps you to get startup with BOSS GNU/Linux and help you in using for basic installation of packages and view the contents etc. If you want to learn about Linux in detail, then please find some document which is completely written for Linux and work with BOSS GNU/Linux. If you find any difficulty anywhere while using BOSS GNU/Linux, then inform us at bosslinux@cdac.in

5.1 Opening a Shell Prompt

The desktop offers access to a *shell prompt*, an application that allows you to type commands instead of using a graphical interface for all computing activities. While *BOSS GNU/Linux Quick Start Guide* primarily focuses on performing tasks using the graphical interface and graphical tools, it is sometimes useful and faster to perform tasks from a shell prompt.

You can open a Shell prompt/Terminal by selecting **Applications -> Accessories -> Terminal**.



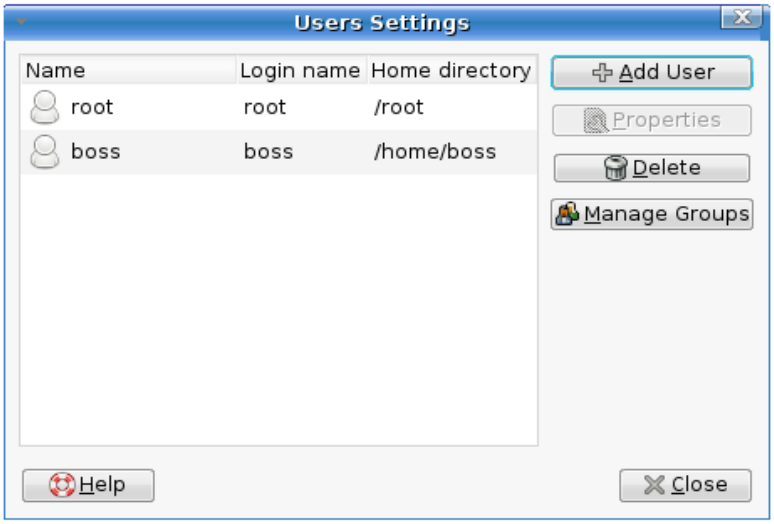
To exit a shell prompt, click the **X** button on the upper right corner of the shell prompt window, or type **exit** at the prompt.

5.2 Create a New User

During the installation process of BOSS GNU/Linux, you will be able to create one user account. If you want to create some more user accounts after installation then you can use the Graphical Interface for users creation else you can go with the shell prompt. First we will discuss about the GUI method later we will discuss about the shell prompt method

To create new user account

- Select **System -> Administration -> Users and Groups** from the menu else you can start this GUI from the shell prompt by typing *users-admin.*
- If you are not logged in as root, you will be prompted for root password.
- The following window will appear.



- Click on **Add User,** which opens an interface to enter details about the username, password etc. Enter all the details and click on **OK**. Thus the new user is added.

To create a user from shell prompt:

- Open the terminal and type **adduser.**
- If you are not logged in as root then type su to change to root user and execute the **adduser** command.
- It prompts you to enter the password for the newly created user and further details. You can skip the details if you doesn't need them.

5.3 Documentation for Linux Commands

If you want to learn more about the Linux commands then you can see the man pages for each command which explains you the details about the command and its usage. Man pages of a command are nothing but the manual pages. They can be viewed by using the man command. Like:

Syntax :

```
$ man <command>
```

Example :

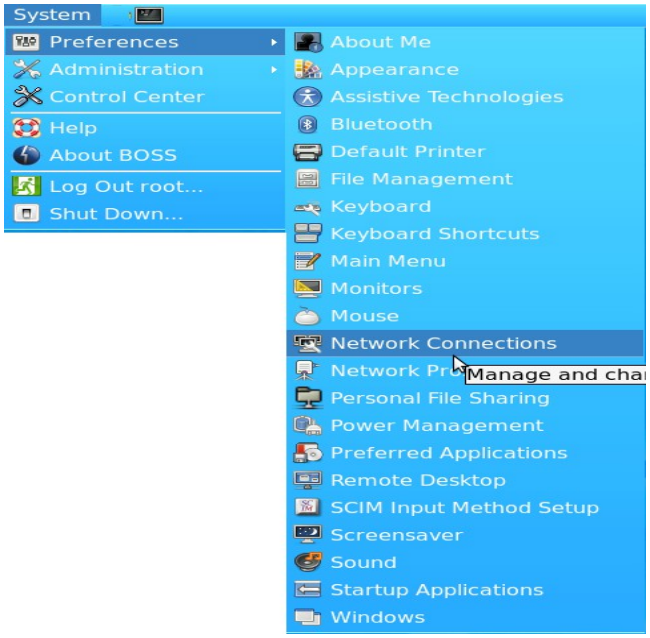
```
$ man ls     // Displays the help page for the ls command
```

6. Networking

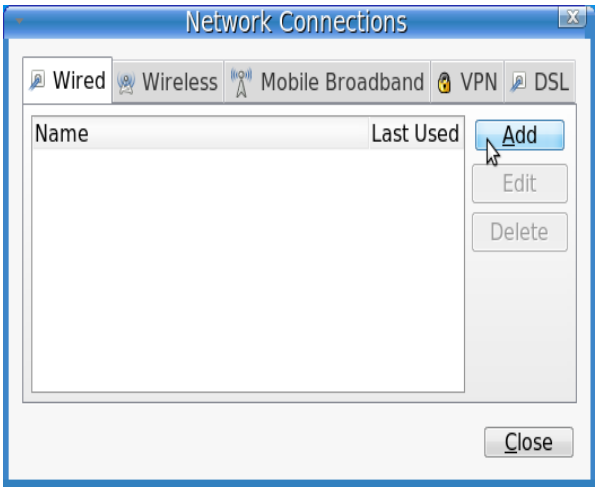
Configuring Network has some simple steps to be followed:

6.1 Networking through Ethernet

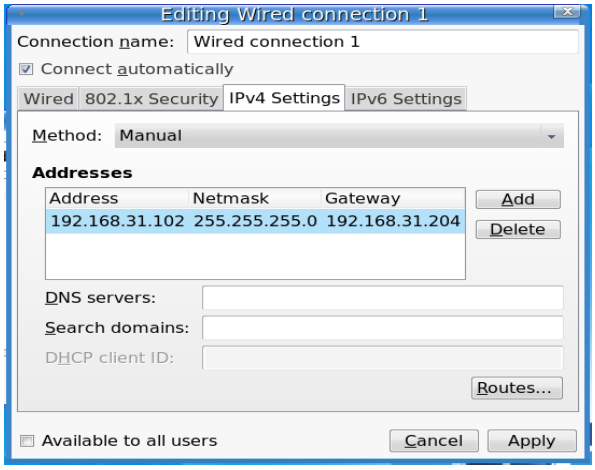
1. Go to **System -> Preferences -> Network Connections** or type **nm-connection-editor** in terminal and press *Enter*



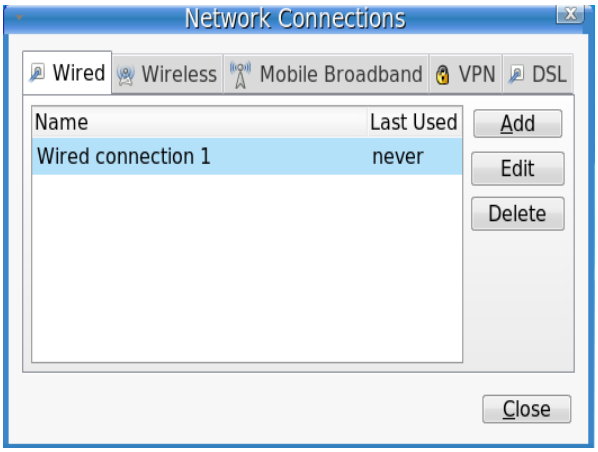
2. Select the Wired Connection



3. Set the IP address , Gateway etc., and click “OK”.

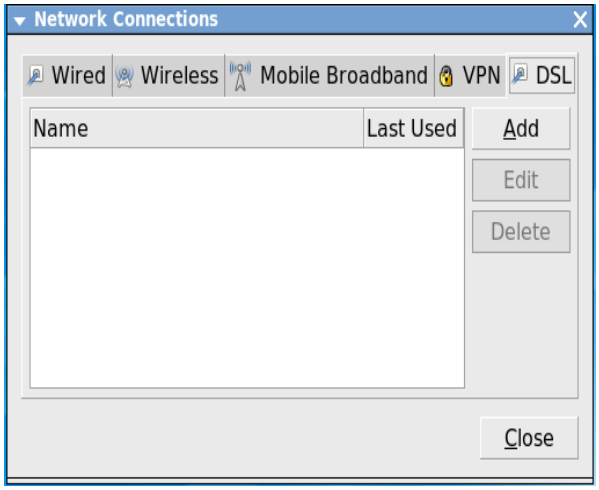


4. Click the “Apply” button.



6.2 Setting up Broadband Internet connection in BOSS

1.Go to **System -> Preferences -> Network Connections** or type **nm-connection-editor** in terminal and press *Enter*

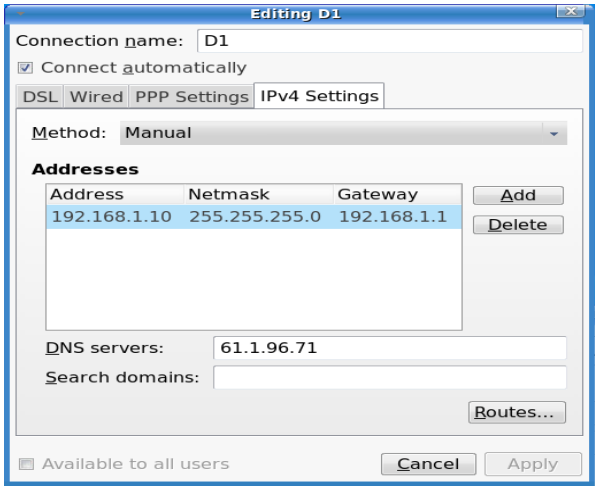


2.Click add to enter network configuration details.

Enter the username and password provided by the ISP provider.In the service specify PPPoE.

4.If you have static IP Address provided by the ISP then click Ipv4 Settings in the menu.

Enter the static ip address,netmask,gateway address and if any Domain Name Server Address specify it.



5.After entering the network details click apply.

Alternatively we configure by following procedure.

If your ISP assigned a username and password to use when you connect to your broadband Internet connection, then you must set up PPPoE before you can connect to the Internet. Click **Administration -> ADSL/PPPOE Configuration**. This application will attempt to detect PPPoE use on your network, and then enter your username and password to connect to the ISP.

•If there is any previous connection make the required modifications.

•Normally the "Use Peer DNS" and "Limited MSS problem" are set YES
•If you want your internet connection to be set up every time you login.,then give YES for Startup option.
•Set the connection immediately and enjoy surfing in BOSS.

If you don't want to go for a startup option, then you can start the connection manually everytime on demand through terminal by using the following command:

sudo pon dsl-provider

To stop the ADSL connection type
sudo poff dsl-provider

Later in case if you want to set up the connection everytime in startup.,ie at booting time.,
sudo gedit /etc/network/interfaces

and add the below lines to the file
pre-up /sbin/ifconfig eth0 up # line maintained by pppoeconf
auto dsl-provider
iface dsl-provider inet ppp
provider dsl-provider

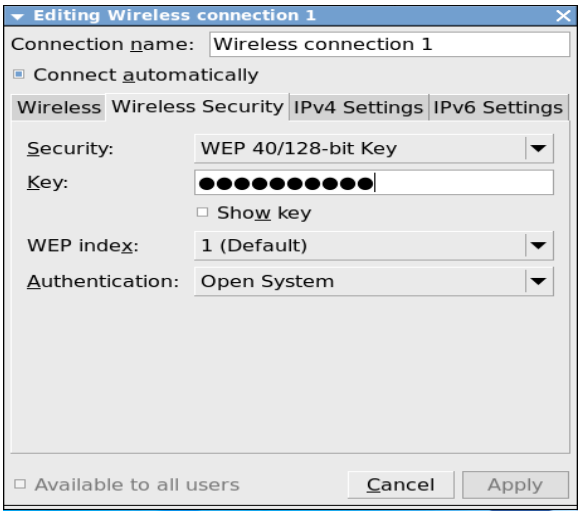
6.3 Wireless Connection

To configure network click **System -> Administration -> Network Connections** or type **nm-connection-editor** in terminal and press *Enter*.

Any networks are not shown or hidden wireless networks configuration will setup following way.

1.Enter the network name (SSID)

2.Enter the network key (WEP/128bit) to Connect to the Wireless Network.



3.Click Apply.

Select “Wireless Connection” in the screen that appears.

Now, by default, all the network interfaces are configured. The default interface for your wired connection is **eth0**, the default interface for your wireless connection is **eth1**, while that for your modem should be **ppp0**. Click on “Wireless Connection”, and then click “Properties”.

Once you've filled your SSID (network name) and WEP key (if there is one), then you have to make sure that you have the correct IP address. If there is no IP address, leave it on “Automatic configuration(DHCP)” which is the default. If there is, change the configuration to “Static IP address”, and input your IP address in the fields provided. After you've clicked “OK”, you are ready to go.

By clicking the network icon in taskbar in the desktop,it shows all the all the availabel networks including wireless,wired connections.below snopshot show these details.

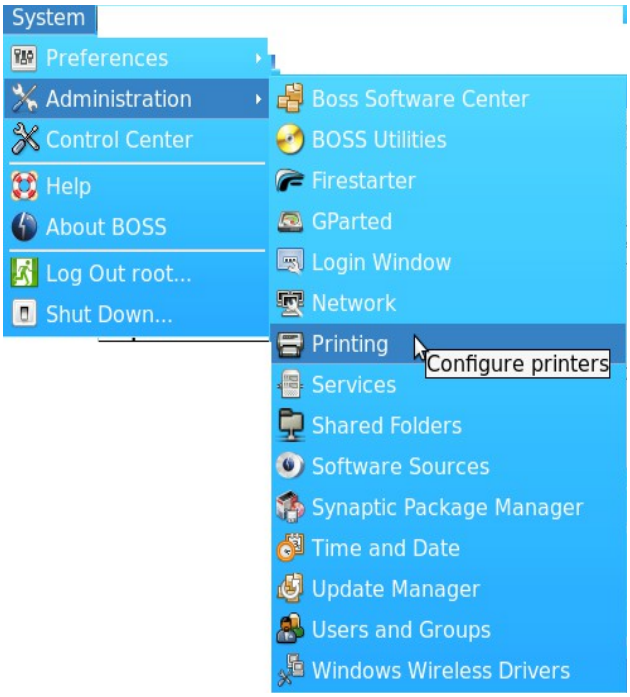
7. Hardware Configurations

7.1 Printers

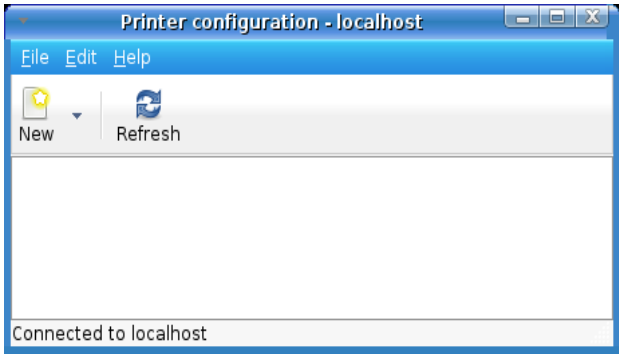
BOSS GNU/Linux contains drivers for most of the Printers, just you have to configure the printer IP. The procedure consist of 4 steps:

Steps for Printer Configuration

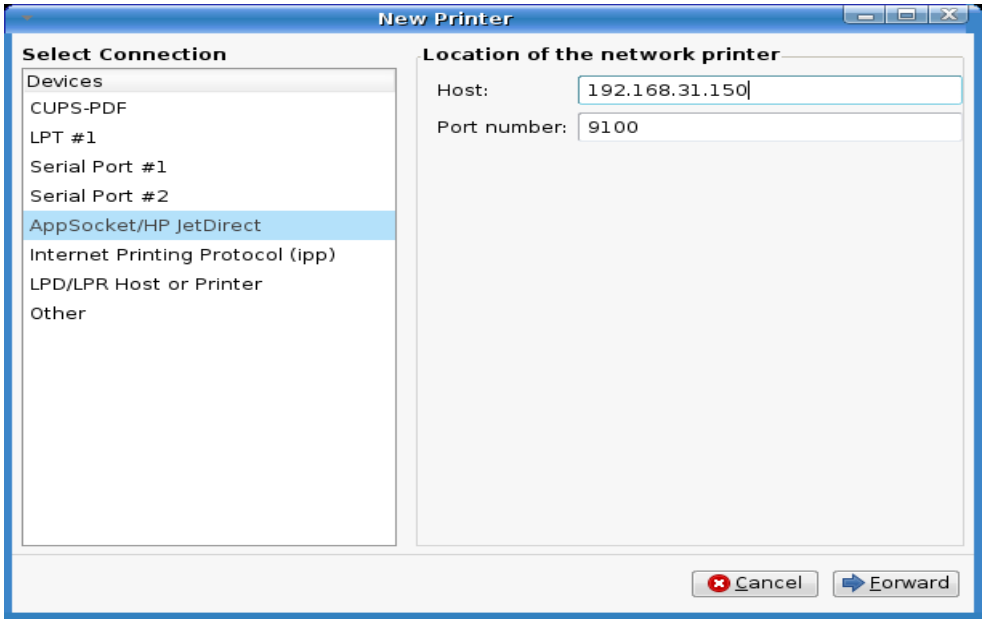
1. Go to **System -> Administration -> Printing** or type **system-config-printer** in terminal and press *Enter*



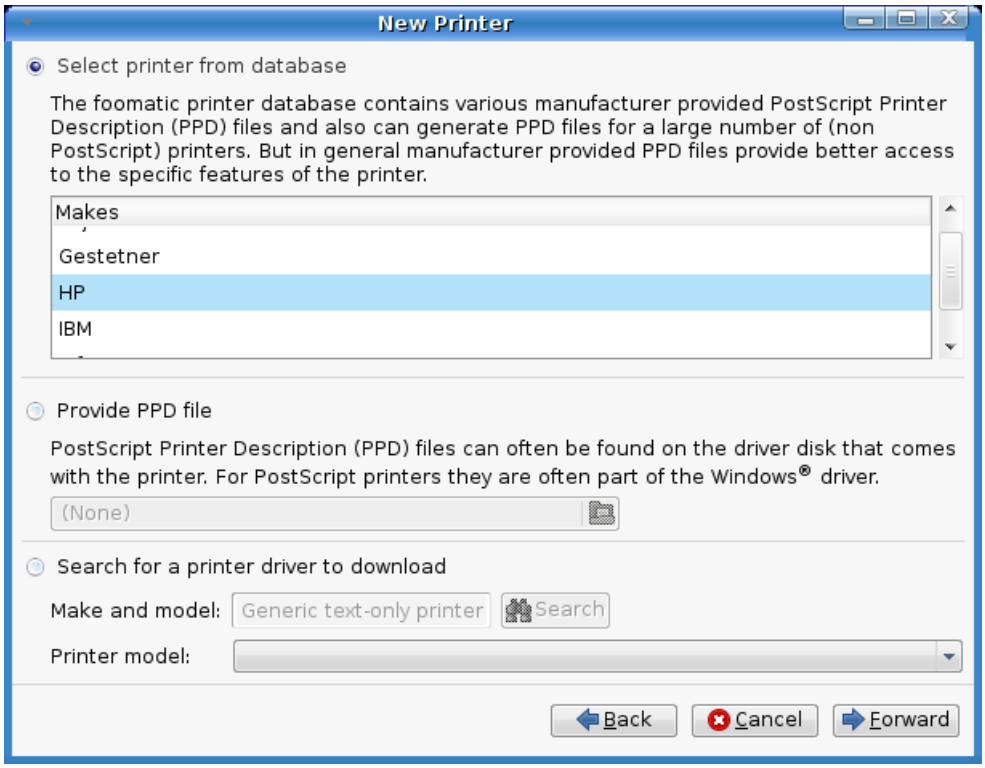
2. Click on “New”



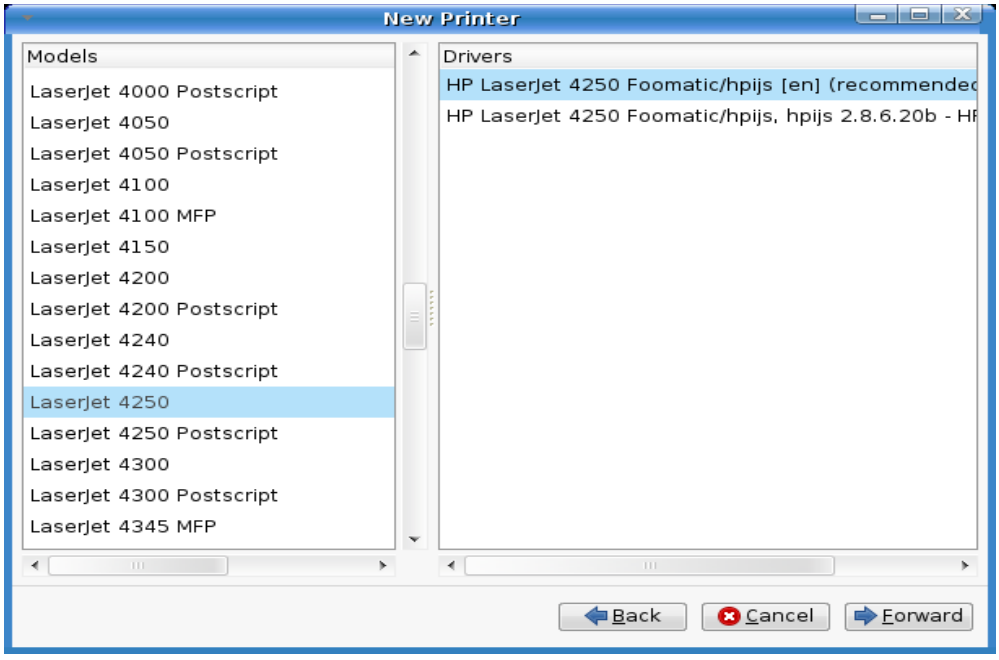
3. Select the the type of the printer. For Network printer enter the IP address, port no and click “Forward”



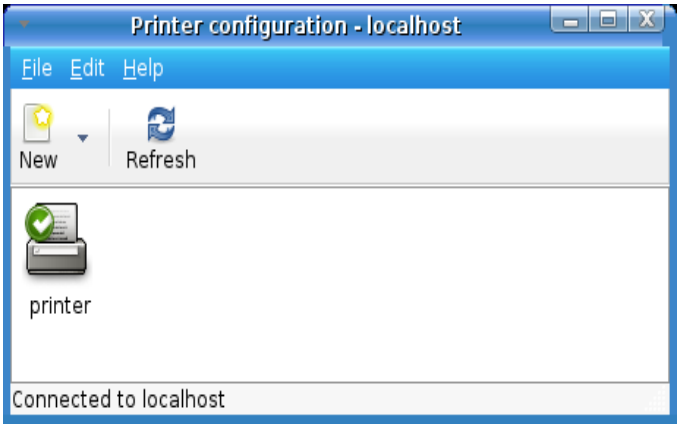
4. Select the Printer Company and click “Forward”


New Printer
Select printer from database
The foomatic printer database contains various manufacturer provided PostScript Printer Description (PPD) files and also can generate PPD files for a large number of (non PostScript) printers. But in general manufacturer provided PPD files provide better access to the specific features of the printer.
Makes
Gestetner
HP
IBM
Provide PPD file
PostScript Printer Description (PPD) files can often be found on the driver disk that comes with the printer. For PostScript printers they are often part of the Windows® driver.
(None)
Search for a printer driver to download
Make and model:
Generic text-only printer
Search
Printer model:
Back
Cancel
Forward

5. Select the Printer Model and click “Forward”.



So, now your printer is configured successfully.



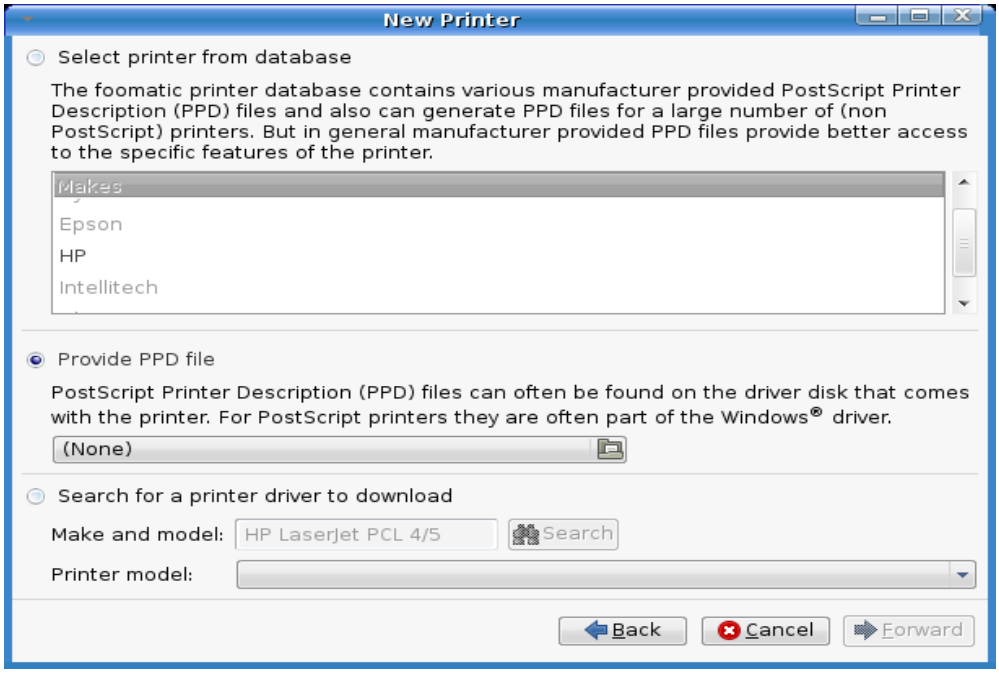
Installing Printer drivers externally if not available in BOSS GNU/Linux

If you are not able to find your printer model in the list provided then download the divers from the following website:

http://www.linuxprinting.org/printer_list.cgi

Here you select the printer company and the model from the select box and click on “Show”. This will follow up a page where you need to search for the Recommended Drivers line and click on “Custom PPD” or “Download PPD” [Differs based on printer]. Save this PPD file in your system.

Now Select the Printing option from **System –> Administration –> Printing**. In the Step 2 of configuration (figure shown below) click on “Provide PPD File”. Then click on the open folder and select the saved PPD file. This installs your printer divers into your system.


New Printer
Select printer from database
The foomatic printer database contains various manufacturer provided PostScript Printer Description (PPD) files and also can generate PPD files for a large number of (non PostScript) printers. But in general manufacturer provided PPD files provide better access to the specific features of the printer.
Makes
Epson
HP
Intellitech
Provide PPD file
PostScript Printer Description (PPD) files can often be found on the driver disk that comes with the printer. For PostScript printers they are often part of the Windows® driver.
(None)
Search for a printer driver to download
Make and model:
HP LaserJet PCL 4/5
Search
Printer model:
Back
Cancel
Forward

7.2 Scanner Usage

Plug-in the Scanner and select XSane Image Scanning Program from **Applications -> Graphics -> XSane Image Scanning Program** or type **xsane** in terminal and press *Enter*

The scanner will be detected and the images can be scanned now.

If your scanner drivers are not already present in BOSS GNU/Linux then you can download them from the link http://www.sane-project.org/sane-mfgs.html and install the drivers. The steps for installation are mentioned in the software itself.

7.3 USB

As soon as the USB is plugged in, it is auto detected and can be used without any manual mounting and configuring.

7.4 Webcam, Digital Camera

Connect the device to your system.

To use Webcam choose **Applications -> Graphics -> Webcam Viewer** or type **cheese** in terminal and press *Enter*.

To use Digital Camera choose **Applications -> Graphics -> gtkam** or type **gtkam** in terminal and press *Enter*.

If your Webcam or Digital camera drivers are not already present in BOSS GNU/Linux then you can download them from the following link and install the drivers. The steps for installation are mentioned in the software itself.

Links:

http://www.linux.com/howtos/Webcam-HOWTO/devices.shtml

http://alpha.ovcam.org/ov511/cameras.html#chipsets

http://webcam.sourceforge.net/#cams

http://www.cs.umu.se/~c00ahs/exjobb/philips/

http://www.sane-project.org/sane-mfgs.html

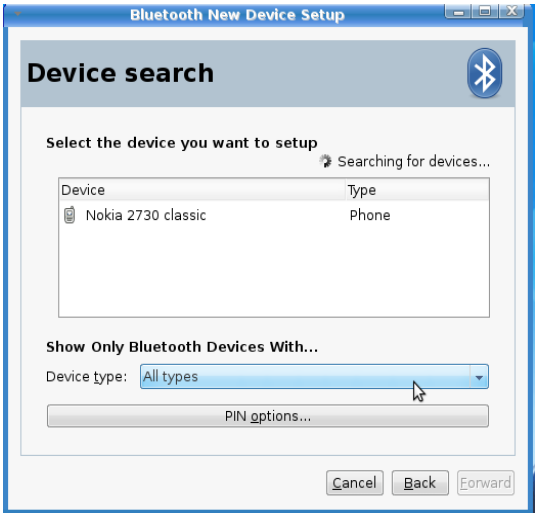
http://tuukkat.cabspace.com/quickcam/quickcam.html

7.5 Bluetooth Support

Bluetooth is an industrial specification for wireless personal area networks (PANs). Bluetooth provides a way to connect and exchange information between devices such as mobile phones, laptops, PCs, printers, digital cameras and video game consoles via a secure, globally unlicensed short-range radio frequency.

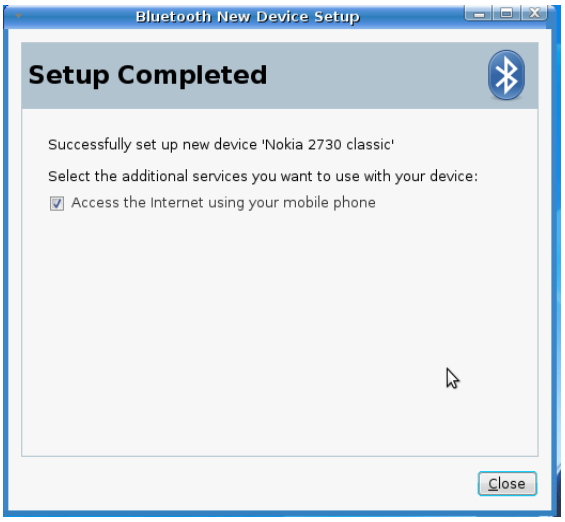
Internet Connection through bluetooth using mobile

1) Click the Bluetooth icon in the Desktop and it will search for the all the blue tooth devices connected to the System.
2) Select phone to show all mobile devices connected to the system.



3) Select the particular mobile device want to setup connection with the system.after click 'forward' it will show the window having PIN number that should entered in the mobile device to setup finish.

4) After entering the bluetooth and system is connected .It will show the window in the system having option 'connect internet through your mobile phone' select this option and close.

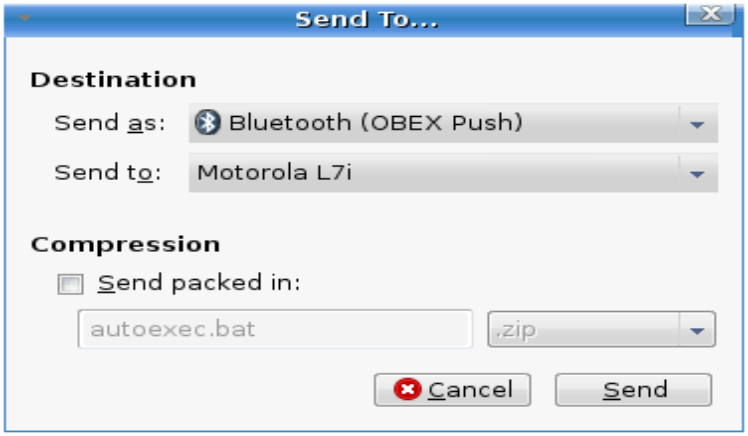

Bluetooth New Device Setup
Setup Completed
Successfully set up new device 'Nokia 2730 classic'
Select the additional services you want to use with your device:
Access the Internet using your mobile phone
Close

5) Now Your system connected to internet.Network icon shows Mobile Internet Icon.

Usage of Bluetooth

1.Transfer data from your PC to other external device(a device that supports bluetooth).

•Activate bluetooth in both the PC and the external device.
•Right-click on the file you want to send through bluetooth and select “Sent to...”.
•A window as shown in the figure appears. In “Sent to” select the device to which you want to transfer the file.



2. Transfer data from external device(a device that supports bluetooth) to your PC.

•External device will detect your PC as 'BOSS-0' (scan it)
•Send file from your device using bluetooth.
•In your PC , Accept request from your device.
•Data will be in your $HOME folder.

8. LibreOffice

LibreOffice is a freely available, fully-featured office productivity suite. Its native file format is OpenDocument, an open standard format that is being adopted by governments worldwide as a required file format for publishing and accepting documents. LibreOffice can also open and save documents in many other formats, including those used by several versions of Microsoft Office.

Development Efforts

As part of the project, LibreOffice has been built from source (tag 641) on Windows with the resource strings translated and the suite localized in Hindi, support for Indian locales and Complex Text Layout for Hindi has also been implemented. The LibreOffice community has granted a joint copyright to this work done at the Centre for Development of Advanced Computing (C-DAC, formerly NCST), Electronics City, Bangalore, and a Hindi Native Language project has been setup in conjunction with this work at (http://hi.openoffice.org) to disseminate information on the project, and its developmental aspects. The following details the technical aspects of the development.

Localization

Localization involved translation of the OpenOffice.org glossary having 7000 strings and resource strings, with approximately 21000 strings. Resource strings were extracted from the built source, translated in Hindi, and merged back with the localization tools. For localizing the source, the Hindi language had to be added to the build environment, build tools, resource system and installation setup projects, altogether comprising 8 independent modules of the OpenOffice.org source. Finally, this localized source, containing Hindi translations was then rebuilt to produce a Hindi localized installation, which had the entire user interface elements (menus, strings, messages, tooltips, popups, dialog boxes and so on) in Hindi.

8.1 The LibreOffice Components

Components	**Purpose**
Writer	Word processor
Calc	Application for Spreadsheet
Impress	Application for Presentation
Base	Application for Database
Draw	Application for drawing vector graphics

Math	Application for generating mathematical formulas

8.2 Word Processing with Writer

Writer is a feature-rich tool for creating letters, books, reports, newsletters, brochures, and other documents. You can insert graphics and objects from other components into Writer documents. Writer can export files to HTML, XHTML, XML, Adobe's Portable Document Format (PDF), and several versions of Microsoft Word files. It also connects to your email client.

In addition to the usual features of a word processor (spelling check, thesaurus, hyphenation, autocorrect, find and replace, automatic generation of tables of contents and indexes, mail merge and others), Writer provides these important features:

- Templates and styles (see Chapter 3)
- Page layout methods, including frames, columns, and tables
- Embedding or linking of graphics, spreadsheets, and other objects
- Built-in drawing tools
- Master documents—to group a collection of documents into a single document
- Change tracking during revisions
- Database integration, including a bibliography database
- Export to PDF, including bookmarks (see Chapter 10)
- And many more

To open writer, choose **Applications -> Office → LibreOffice Writer** or type LibreOffice **-writer** in terminal and press *Enter*.

Starting a New Document

You can start a new, blank document in LibreOffice in several ways.

When LibreOffice is open but no document is open (for example if you close all the open documents but leave the program running), the Start Center is shown. Click one of the icons to open a new document of that type, or click the Templates icon to start a new document using a template.

You can also start a new document in one of the following ways:

- Use File > New and choose the type of document.
- Use the arrow next to the New button on the main toolbar. From the drop-down menu,

select the type of document to be created.

- Press Control+N on the keyboard.
- Use File > Wizards for some special types of documents.

If a document is already open in LibreOffice, the new document opens in a new window.

Opening an Existing Document

When no document is open, the Start Center provides an icon for opening an existing document or choosing from a list of recently-edited documents.

You can also open an existing document in one of the following ways:

- Choose File > Open.
- Click the Open button on the main toolbar.
- Press Control+O on the keyboard.

In each case, the Open dialog appears. Select the file you want, and then click Open. If a document is already open in LibreOffice, the second document opens in a new window.

Saving a document

To save a new document, do one of the following:

- Press Control+S.
- Choose File > Save from the menu bar.
- Click the Save button on the main toolbar.

When the Save As dialog appears, enter the file name, verify the file type (if applicable), and click Save.

To save an open document with the current file name, choose File > Save. This will overwrite the last saved state of the file.

Renaming and Deleting files

You can rename or delete files within the LibreOffice dialogs, just as you can in your usual file manager. However, you cannot copy or paste files within the dialogs.

Using the Navigator

The Navigator lists objects contained in a document, collected into categories. For example, in Writer it shows Headings, Tables, Text frames, Comments, Graphics, Bookmarks, and other items, as shown in Figure 13. In Calc it shows Sheets, Range Names, Database Ranges, Graphics, Drawing Objects, and other items. In Impress and Draw it shows Slides, Pictures, and other items.

To open the Navigator, click its icon Navigator on the Standard toolbar, or press F5, or choose View > Navigator on the menu bar .

Using the Styles and Formatting Window

A style is a set of formats that you can apply to selected pages, text, frames, and other elements in your document to quickly change their appearance. When you apply a style, you apply a whole group of formats at the same time.

Many people manually format paragraphs, words, tables, page layouts, and other parts of their documents without paying any attention to styles. They are used to writing documents according to physical attributes. For example, you might specify the font family, font size, and any formatting such as bold or italic.

LibreOffice supports the following types of styles:

- Page styles include margins, headers and footers, borders and backgrounds. In Calc, page styles also include the sequence for printing sheets.
- Paragraph styles control all aspects of a paragraph's appearance, such as text alignment, tab stops, line spacing, and borders, and can include character formatting.
- Character styles affect selected text within a paragraph, such as the font and size of text, or bold and italic formats.
- Frame styles are used to format graphic and text frames, including wrapping type, borders, backgrounds, and columns.
- Numbering styles apply similar alignment, numbering or bullet characters, and fonts to numbered or bulleted lists.
- Cell styles include fonts, alignment, borders, background, number formats (for example, currency, date, number), and cell protection.
- Graphics styles in drawings and presentations include line, area, shadowing, transparency, font, connectors, dimensioning, and other attributes.
- Presentation styles include attributes for font, indents, spacing, alignment, and tabs.

Applying a Style

LibreOffice provides several ways for you to select styles to apply.

- Click the Styles and Formatting icon located at the left-hand end of the formatting toolbar, or click Format > Styles and Formatting, or press F11. The Styles and Formatting window shows the types of styles available for the LibreOffice component you are using. You can move this window to a convenient position on the screen or dock it to an edge (hold down the Ctrl key and drag it by the title bar to where you want it docked).

- Click on one of the icons at the top left of the Styles and Formatting window to display a list of styles in a particular category.
- To apply an existing style (except for character styles), position the insertion point in the paragraph, frame, or page, and then double-click on the name of the style in one of these lists. To apply a character style, select the characters first.

Using Templates to Create a documents

To use a template to create a document:

1) From the main menu, choose File > New > Templates and Documents. The Templates and Documents dialog opens.

2) In the box on the left, click the Templates icon if it is not already selected. A list of template folders appears in the center box.

3) Double-click the folder that contains the template that you want to use. A list of all the templates contained in that folder appears in the center box.

4) Select the template that you want to use. You can either preview the selected template or view the template's properties:

- To preview the template, click the Preview icon appears in the box on the right.
- To view the template's properties, click the Document Properties icon template's properties appear in the box on the right.

5) Click Open. The Templates and Documents dialog closes and a new document based on the selected template opens in LibreOffice. You can then edit and save the new document just as you would any other document.

Associating a document with a different template

At times you might want to associate a document with a different template, or perhaps you are working with a document that did not start from a template.

One of the major advantages of using templates is the ease of updating styles in more than one document, as described on page 69. If you update styles by loading a new set of styles from a different template, the document has no association with the template from which the styles were loaded—so you cannot use this method. What you need to do is associate the document with the different template. You can do this in two ways.

Method 1

This method includes any graphics and wording (such as legal notices) that exists in the new template, as well as including styles. If you do not want this material, you need to delete it.

1) Use File > New > Templates and Documents. Choose the template you want. If the template has unwanted text or graphics in it, delete them.

2) Open the document you want to change. (It opens in a new window.) Press Control+A to select everything in the document. Paste into the blank document created in step 1.

3) Update the table of contents, if there is one. Save the file.

Method 2 (Writer only)

This method does not include any graphics or text from the new template, except material in headers and footers; it simply includes styles from the new template and establishes an association between the template and the document.

1) Open the document whose template you want to change. Choose File > Templates > Assign Template (current document).

2) In the Select Template window, find and select the required template and click Open.

3) Save the document. If you now look in File > Properties, you will see the new template listed at the bottom of the General page.

Writer – Working with text

Working with text (selecting, copying, pasting, moving) in Writer is similar to working with text in any other program. LibreOffice also has some convenient ways to select items that are not next to each other, select a vertical block of text, and paste unformatted text.

Selecting items that are not consecutive

To select nonconsecutive items using the mouse:

1) Select the first piece of text.

2) Hold down the Ctrl key and use the mouse to select the next piece of text.

3) Repeat as often as needed.

Now you can work with the selected text (copy it, delete it, change the style, or whatever).

Inserting special characters

A special character is one not found on a standard English keyboard. For example, © ¾ æ ç ñ ö ø ¢ are all special characters. To insert a special character:

1) Place the cursor where you want the character to appear.

2) Choose Insert > Special Character to open the Special Characters dialog.

3) Select the characters (from any font or mixture of fonts) you wish to insert, in order, then click OK. The selected characters are shown in the lower left of the dialog. As you select a character, it is shown on the lower right, along with its numerical code.

Checking spelling and grammar

Writer provides a spelling checker, which can be used in two ways.

- AutoSpellcheck checks each word as it is typed and displays a wavy red line under any misspelled words. When the word is corrected, the line disappears.
- To perform a separate spelling check on the document (or a text selection) click the Spelling and Grammar button. This checks the document or selection and opens the Spelling and Grammar dialog if any misspelled words are found.
- You can right-click on a word with a wavy underline to open a context menu. If you select from the suggested words on the menu, the selection will replace the misspelled word in your text. Other menu options are discussed below.
- You can change the dictionary language (for example, Spanish, French or German) on the Spelling and Grammar dialog.
- You can add a word to the dictionary. Click Add in the Spelling and Grammar dialog and pick the dictionary to add it to.
- Click the Options button on the Spelling and Grammar dialog to open a dialog similar to the one in Tools > Options > Language Settings
- There you can choose whether to check uppercase words and words with numbers, and you can manage custom dictionaries, that is, add or delete dictionaries and add or delete words in a dictionary.
- On the Font tab of the Paragraph Styles dialog, you can set paragraphs to be checked in a specific language (different from the rest of the document). See Chapter 7, Working with Styles, in the Writer Guide for more information.

Writer includes a grammar checker (LightProof), which you can access from Tools > Spelling and Grammar.

Creating a Table of contents

Writer's table of contents feature lets you build an automated table of contents from the headings in your document. Before you start, make sure that the headings are styled consistently. For example, you can use the Heading 1 style for chapter titles and the Heading 2 and Heading 3 styles for chapter subheadings.

Although tables of contents can be customized extensively in Writer, often the default settings are all you need. Creating a quick table of contents is simple:

1) When you create your document, use the following paragraph styles for different heading levels (such as chapter and section headings): Heading 1, Heading 2, Heading 3, and so on. These are what will appear in your table of contents.

2) Place the cursor where you want the table of contents to be inserted.

3) Choose Insert > Indexes and Tables > Indexes and Tables.

4) Change nothing in the Insert Index/Table dialog. Click OK.

If you add or delete text (so that headings move to different pages) or you add, delete, or change headings, you need to update the table of contents.

To do this:

1) Place the cursor within the table of contents.

2) Right-click and choose Update Index/Table from the pop-up menu.

Creating indexes and bibliographies

Indexes and bibliographies work in a similar way to tables of contents. Chapter 12, Creating Tables of Contents, Indexes and Bibliographies, in the Writer Guide describes the process in detail.

In addition to alphabetical indexes, other types of indexes supplied with Writer include those for illustrations, tables, and objects, and you can even create a user-defined index. For example, you might want an index containing only the scientific names of species mentioned in the text, and a separate index containing only the common names of species. Before creating some types of indexes, you first need to create index entries embedded in your Writer document.

Working with graphics

Graphics in Writer are of three basic types:

- Image files, including photos, drawings, scanned images, and others
- Diagrams created using LibreOffice's drawing tools
- Charts created using LibreOffice's Chart component

Using master documents

Master documents are typically used for producing long documents such as a book, a thesis, or a long report; or when different people are writing different chapters or other parts of the full document, so you don't need to share files. A master document joins separate text documents into one larger document, and unifies the formatting, table of contents (TOC), bibliography, index, and other tables or lists.

8.3 Using Spreadsheets with Calc

Calc is the spreadsheet component of LibreOffice. You can enter data (usually numerical) in a spreadsheet and then manipulate this data to produce certain results.

Alternatively you can enter data and then use Calc in a 'What if...' manner by changing some of the data and observing the results without having to retype the entire spreadsheet.

Other features provided by Calc include:

- Functions, which can be used to create formulas to perform complex calculations on

data

- Database functions, to arrange, store, and filter data
- Dynamic charts; a wide range of 2D and 3D charts
- Macros, for recording and executing repetitive tasks
- Ability to open, edit, and save Microsoft Excel spreadsheets
- Import and export of spreadsheets in multiple formats, including HTML, CSV, PDF, and PostScript

To open calc choose **Applications -> Office -> LibreOffice Calc** or type **LibreOffice-calc** in terminal and press *Enter*.

Spreadsheets, sheets and cells

Calc works with documents called spreadsheets. Spreadsheets consist of a number of individual sheets, each sheet containing cells arranged in rows and columns. A particular cell is identified by its row number and column letter.

Cells hold the individual elements-text, numbers, formulas, and so on-that make up the data to display and manipulate.

Each spreadsheet can have many sheets, and each sheet can have many individual cells. In Calc 3.3, each sheet can have a maximum of 1,048,576 rows and 1024 columns

Parts of the main Calc window

Title bar

The Title bar, located at the top, shows the name of the current spreadsheet. When the spreadsheet is newly created, its name is Untitled X, where X is a number. When you save a spreadsheet for the first time, you are prompted to enter a name of your choice.

Menu bar

Under the Title bar is the Menu bar. When you choose one of the menus, a submenu appears with other options. You can modify the Menu bar, by Customizing LibreOffice.

Toolbars

Three toolbars are located under the Menu bar by default: the Standard to toolbar, the Formatting toolbar, and the Formula Bar.

The icons (buttons) on these toolbars provide a wide range of common commands and functions.

In the Formatting toolbar, the three boxes on the left are the Apply Style, Font Name, and Font Size lists. They show the current setting for the selected cell or area. (The Apply Style list may not be visible by default.) Click the down-arrow to the right of each box to open the list.

Formula bar

On the left hand side of the Formula bar is a small text box, called the Name Box, with a letter and number combination in it, such as D7. This combination, called the cell reference, is the column letter and row number of the selected cell.

To the right of the Name box are the the Function Wizard, Sum, and Function buttons.

Clicking the Function Wizard button opens a dialog from which you can search through a list of available functions This can be very useful because it also shows how the functions are formatted.

In a spreadsheet the term function covers much more than just mathematical functions. Clicking the Sum button inserts a formula into the current cell that totals the numbers in the cells above the current cell. If there are no numbers above the current cell, then the cells to the left are placed in the Sum formula.

Clicking the Function button inserts an equals (=) sign into the selected cell and the Input line, enabling the cell to accept a formula.

Opening a spreadsheet file

To open a file in Calc:

1) Choose File > Open.

2) Locate the CSV file that you want to open.

3) If the file has a *.csv extension, select the file and click Open.

4) If the file has another extension (for example, *.txt), select the file, select Text CSV (*csv;*txt;*xls) in the File type box (you will have to scroll down some distance to find it) and then click Open.

5) On the Text Import dialog, select the Separator options to divide the text in the file into columns. You can preview the layout of the imported data at the bottom of the dialog. Right-click a column in the preview to set the format or to hide the column.

If the CSV file uses a text delimiter character that is not in the Text delimiter list, click in the Text delimiter box, and type the character.

6) Click OK to open the file.

Saving as a CSV file

To save a spreadsheet as a comma separate value (CSV) file:

1) Choose File > Save As.

2) In the File name box, type a name for the file.

3) In the File type list, select Text CSV (.csv) and click Save. You may see the message box shown below. Click Keep Current Format.

Working with columns and rows

Inserting columns and rows

Columns and rows can be inserted individually or in groups.

Single column or row

Using the **Insert** menu:

1) Select the cell, column or row where you want the new column or row inserted.

2) Choose either Insert > Columns or Insert > Rows.

Using the mouse:

1) Select the cell, column or row where you want the new column or row inserted.

2) Right-click the header of the column or row.

3) Choose Insert Rows or Insert Columns.

Multiple columns or rows

Multiple columns or rows can be inserted at once rather than inserting them one at a time.

1) Highlight the required number of columns or rows by holding down the left mouse button on the first one and then dragging across the required number of identifiers.

2) Proceed as for inserting a single column or row above. The specified number of rows/columns will be inserted above or to the left of the first one you selected.

Deleting columns and rows

Columns and rows can be deleted individually or in groups.

Single column or row

A single column or row can only be deleted by using the mouse:

1) Select the column or row to be deleted.

2) Right-click on the column or row header.

3) Select Delete Columns or Delete Rows from the pop-up menu.

Multiple columns or rows

Multiple columns or rows can be deleted at once rather than deleting them one at a time.

1) Highlight the required number of columns or rows by holding down the left

mouse button on the first one and then dragging across the required number of identifiers.

2) Proceed as for deleting a single column or row above.

Working with sheets

Like any other Calc element, sheets can be inserted, copied, moved, deleted, and renamed.

There are several ways to insert a new sheet. The fastest method is to click on the Add Sheet button to the right of the sheet tabs. If you cannot see this button, drag the separator bar next to the tabs towards the right to make space for it. This button inserts one new sheet at that point, without opening the Insert Sheet dialog.

Moving and copying sheets

You can move or copy sheets within the same spreadsheet by using either the mouse (drag and drop) or a dialog. Drag and drop does not work if you wish to move or copy a sheet to a different spreadsheet; instead, you need to use the dialog.

Validating cell contents

When creating spreadsheets for other people to use, you may want to make sure they enter data that is valid or appropriate for the cell. You can also use validation in your own work as a guide to entering data that is either complex or rarely used.

Fill series and selection lists can handle some types of data, but they are limited to predefined information. To validate new data entered by a user, select a cell and use Data > Validity to define the type of contents that can be entered in that cell. For example, a cell might require a date or a whole number, with no alphabetic characters or decimal points; or a cell may not be left empty.

Sorting records

Sorting is often useful when you add new information. When a list is long, it is usually easier to add new information at the bottom of the sheet, rather than adding rows in the proper places. After you have added information, you can then sort it to update the sheet.

Highlight the cells to be sorted, then select Data > Sort to open the Sort dialog (or click the Sort Ascending or Sort Descending toolbar buttons). Using the dialog, you can sort the selected cells using up to three columns, in either ascending (A-Z, 1-9) or descending (Z-A, 9-1) order.

Using formulas and functions

You may need more than numbers and text on your spreadsheet. Often the contents of one cell depend on the contents of other cells. Formulas are equations using numbers and variables to get a result. The variables are cell locations that hold the data you need for the equation.

A function is a predefined calculation entered in a cell to help you analyze or manipulate data. All you have to do is add the arguments, and the calculation is automatically made for you.

Functions help you create the formulas needed to get the results that you are looking for.

Printing

Printing from Calc is much the same as printing from other LibreOffice components, but some details are different, especially regarding preparation for printing.

Using print ranges

Print ranges have several uses, including printing only a specific part of the data or printing selected rows or columns on every page.

Defining a print range

To define a new print range or modify an existing print range:

1) Highlight the range of cells that comprise the print range.

2) Choose Format > Print Ranges > Define.

The page break lines display on the screen.

Adding to the print range

After defining a print range, you can add more cells to it. This allows multiple, separate areas of the same sheet to be printed, while not printing the whole sheet. After you have defined a print range:

1) Highlight the range of cells to be added to the print range.

2) Choose Format > Print Ranges > Add. This adds the extra cells to the print range.

The page break lines no longer display on the screen.

Removing a print range

It may become necessary to remove a defined print range, for example if the whole sheet needs to be printed later.

Choose Format > Print Ranges > Remove. This removes all defined print ranges on the sheet. After the print range is removed, the default page break lines will appear on the screen.

Editing a print range

At any time, you can directly edit the print range, for example to remove or resize part of the print range. Choose Format > Print Ranges > Edit.

8.4 Using Presentations with Impress

Impress is the presentation (slide show) program included in LibreOffice. You can create slides that contain many different elements, including text, bulleted and numbered lists, tables, charts, and a wide range of graphic objects such as clipart, drawings and photographs. Impress also includes a spelling checker, a thesaurus, text styles, and background styles.

This chapter includes instructions, screenshots, and hints to guide you through the Impress environment while designing your presentations. Although more difficult designs are mentioned throughout this chapter, explanations for creating them are in the Impress Guide. If you have a working knowledge of how to create slide shows, we recommend you use the Impress Guide for your source of information.

To open presentation, choose **Applications -> Office -> LibreOffice Impress** or type **LibreOffice -impress** in terminal and press *Enter.*

Creating a Presentation

To create a new presentation, click **File -> New -> Presentation**. Select the option to use for creating the presentation.

There are two ways to create a presentation:

1. Create an empty presentation

Opens Impress with a blank slide. Use this option to create a new presentation from scratch, without any preformatted slides.

2. Create a presentation from a template

Opens Impress with your choice of template. Use this option to create a new presentation with a predesigned OpenOffice.org template or a template you've created or installed yourself, such as your company's presentation template. Impress uses styles and templates the same way other OpenOffice.org modules do.

Using Master Pages

Master pages give your presentation a consistent look by defining the way each slide looks, what fonts are used, and other graphical elements. Impress uses two types of master pages:

1. Slide master

Contains elements that appear on all slides. For example, you might want your company logo to appear in the same place on every slide. The slide master also determines the text formatting style for the heading and outline of every slide that uses that master page, as well as any information you want to appear in a header or footer.

2. Notes master

Determines the formatting and appearance of the notes in your presentation.

Creating a Slide Master

Impress comes with a collection of preformatted master pages. Eventually, most users will want to customize their presentations by creating their own slide masters.

1. Start Impress, then create a new empty presentation.

2. Click **View -> Master -> Slide Master**.

   This opens the current slide master in Master View.

3. Right-click the left-hand panel, then click “New Master”.

4. Edit the slide master until it has the desired look.

5. Click “Close Master View” or choose **View -> Normal** to return to Normal View.

Applying a Slide Master

Slide masters can be applied to selected slides or to all slides in the presentation.

1. Open your presentation, then click **View -> Master -> Slide Master**.
2. (Optional) If you want to apply the slide master to multiple slides, but not to all slides, select the slides that you want to use that slide master.
3. To select multiple slides, in the Slides Pane, press *Ctrl* and click on the slides you want to use that slide master.
4. In the Task Pane, right-click the master page you want to apply. If you do not see the Task Pane, click **View -> Task Pane**.
5. Apply the slide master by clicking one of the following:.

Apply to All Slides

Applies the selected slide master to all slides in the presentation.

Apply to Selected Slides

Applies the selected slide master to the current slide, or to any slides you select before applying the slide master. For example, if you want to apply a different slide master to the first slide in a presentation, select that slide, then change to Master View and apply a slide master to that slide.

Setting up the slide show

Impress allocates reasonable default settings for slide shows, while at the same time allowing for customizing many aspects of the slide show experience.

Most of the tasks are best done in Slide Sorter view where you can see most of the slides simultaneously. Choose View > Slide Sorter from the menu bar or click the Slide Sorter tab at the top of the workspace.

One slide set – multiple presentations

In many situations, you may find that you have more slides than the time available to present them or you may want to provide a rapid overview without dwelling on the details. Rather than having to create a new presentation, you can use two tools that Impress offers: hiding slides and custom slide shows.

To hide a slide, right-click on the slide thumbnail either in the Slide pane or in the Workspace area. If you are using the Slide Sorter view and choose Hide Slide from the pop-up menu. Hidden slides are marked by a slashed slide number.

If you want to reorder the presentation, choose **Slide Show > Custom Slide Show**. Click on the New button to create a new sequence of slides and save it.

You can have as many slide shows as you want from a single slide set.

Slide transitions

Slide transition is the animation that is played when a slide is changed for the next slide in the presentation. You can configure the slide transition from the Slide Transition drawer in the Tasks pane. Select the desired transition, the speed of the animation, and whether the transition should happen when you click the mouse (preferred) or automatically after a certain number of seconds. Click **Apply to all slides** unless you prefer to have different transitions in the presentation.

Running a slide show

To run a slide show, do one of the following:

- Click Slide Show > Slide Show on the menu bar.
- Click the Slide Show icon on the Presentation toolbar.
- Press F5 on the keyboard.

If the slide transition is Automatic after x seconds, let the slide show run by itself.

If the slide transition is On mouse click, do one of the following to move from one slide to the next:

- Use the arrow keys on the keyboard to go to the next slide or to go back to the previous one.
- Click the mouse to move to the next slide.
- Press the spacebar on the keyboard to advance to the next slide.

Right-click anywhere on the screen to open a menu from which you can navigate the slides and set other options.

To exit the slide show at any time including at the end, press the Esc key.

8.5 Using Databases with Base

Use Base to design a database to store many different kinds of information, from a simple address book or recipe file to a sophisticated document management system. Tables, forms, queries, and reports can be created manually or using convenient wizards. For example, the

Table Wizard contains a number of common fields for business and personal use. Databases created in Base can be used as data sources, such as when creating form letters.

To open database choose, **Applications -> Office -> LibreOffice Base** or type **LibreOffice -base** in terminal and press *Enter.*

Creating a Database Using Predefined Options

Base comes with several predefined database fields to help you create a database. The process for creating a database can be broken into several subprocesses:

Creating a new Database

First, to create a new database follow these steps:

1. Click **File -> New -> Database**.
2. Select “Create a new database”, then click “Next”.
3. Click “Yes, register the database for me” to make your database information available to other OpenOffice.org modules, select both check boxes in the bottom half of the dialog, then click “Finish”.
4. Browse to the directory where you want to save the database, specify a name for the database, then click “OK”.

First time when you use the database it will display a window as shown in this figure.

JRE Required
OpenOffice.org requires a Java runtime environment (JRE) to perform this task. Please install a JRE and restart OpenOffice.org.
OK

To install JRE,follow these steps:

- Open terminal. To open terminal choose **Applications -> Accessories -> Terminal**
- Type vi /etc/apt/sources.list.
- A file will be opened. In that type **deb http://packages.bosslinux.in/boss BOSS main**
- Comment all the other lines in that file by typing “#” infront of each line.
- To save the file press *Esc+:+wq*
- Open Synaptic Package Manager. To open Synaptic Package Manager choose **System -> Administration -> Synaptic Package Manager**.
- Install sun-j2re1.5. To install right-click on that package name and click “Mark for Installation”. Click “Apply”.

Setting Up the Database Table

Data is stored in tables. As an example, your system address book that you use for your e-mail addresses is a table of the address book database. Each address is a data record, presented as a row in that table. The data records consist of data fields, for example the first and the last name fields and the e-mail field.

Creating a New Table using the Table Wizard

1. Open the database file where you want to create the new table.
2. In the left pane of the database window, click the “Tables” icon.
3. Click “Use Wizard to Create Table”.

Creating a New Table using the Design View

1. Open the database file where you want to create the new table.
2. In the left pane of the database window, click the “Tables” icon.
3. Click “Create Table in Design View”.

Creating a New Table View

Some database types support table views. A table view is a query that is stored with the database. For most database operations, a view can be used as you would use a table.

1. Open the database file where you want to create the new table view.
2. In the left pane of the database window, click the “Tables” icon.
3. Click “Create View”.

Working with Queries

If you often want to access only a subset of your data that can be well defined by a filter condition, you can define a query. This is basically a name for the new view at the filtered data. You open the query and see the current data in the table layout that you defined.

Creating a New Query using the Query Wizard

In OpenOffice.org you can create a new query using the Query Wizard:

1. Open the database file where you want to create the new query.
2. In the left pane of the database window, click the “Queries” icon.
3. Click “Use Wizard to Create Query”.

Creating a New Query using the Design View

1. Open the database file where you want to create the new query.
2. In the left pane of the database window, click the "Queries” icon.
3. Click “Create Query in Design View”.

Working with Forms

Using forms, you can define how to present the data. Open a text document or a spreadsheet and insert the controls such as push buttons and list boxes. In the properties dialog of the controls, you can define what data the forms should display.

Creating a New Form With the Form Wizard

In OpenOffice.org, you can create a new form using the Form Wizard:

1. Open the database file where you want to create the new form.
2. In the left pane of the database window, click the “Forms” icon.
3. Click “Use Wizard to Create Form”.

Creating a New Form Manually

1. Open the database file where you want to create the new form.
2. In the left pane of the database window, click the “Forms” icon.
3. Click “Create Form in Design View”.
4. A new text document opens. Use the Form controls to insert the controls into the form.

Working with Reports

A report is a text document that either shows the current data or the data at the time the report was created.

Creating a New Report With the Report Wizard

In OpenOffice.org you can create a new report using the Report Wizard.

1. Open the database file where you want to create the new report.
2. In the left pane of the database window, click the “Reports” icon.
3. Click “Use Wizard to Create Report”.

9. SCIM & OnScreen Keyboard

9.1 SCIM

The Smart Common Input Method platform (SCIM), is an input method platform supporting more than thirty languages (CJK and many European languages) for POSIX-style operating systems including Linux and BSD.

How to Configure different Keyboard using SCIM in BOSS GNU/Linux

Open Gedit/vi/OpenOffice.

1. Press *control+space* to invoke toggle notification icon on task bar.

2. It will show menu of Input Methods available in BOSS GNU/Linux.

3. Select any language. Example Tamil.

Three different type of keyboards are supported

i) **Phonetic Keyboard:** Keyboards are widely used and it has got the English keys in it. So, type some Indian language through this keyboard, the Indian alphabets are written phonetically (a combination of keys can be used to represent one Indian language character) using the English alphabets. For example, the first letter of hindi alphabet can be written as 'ka' through English phonetic keyboard.

ii) **Inscript Keyboard :** Keyboards are used which contains Indian alphabets as the key of this keyboard. So by typing those keys the content of that language can be written.

iii) **Remington Keyboard:** Keyboard also contains keys of the Indian languages and the arrangement of the keys follow the arrangement of a typewriter.

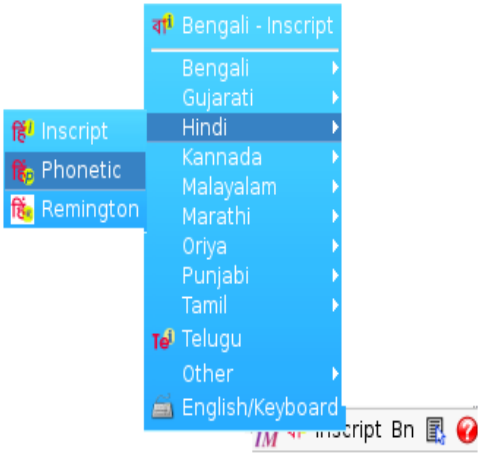
How to use scim

Open the editor in which ever you want to type in different language, either Text Editor or OpenOffice.

Now press *Ctrl+Space* to activate the languages. You can see the languages activated in the bottom right corner as shown below:

Click on the window displayed like above, you will see the languages list and the respective

keyboards supported. Select the language and keyboard support and start typing.



Supported Languages in BOSS GNU/Linux are Hindi, Tamil, Telugu, Malayalam, Punjabi, Marathi, Bengali, Gujarati, and Kannada.

Bengali Inscript Layout

Gujarati Inscript Layout

Kannada Inscript Layout

Malayalam Inscript Layout

Tamil Inscript Layout

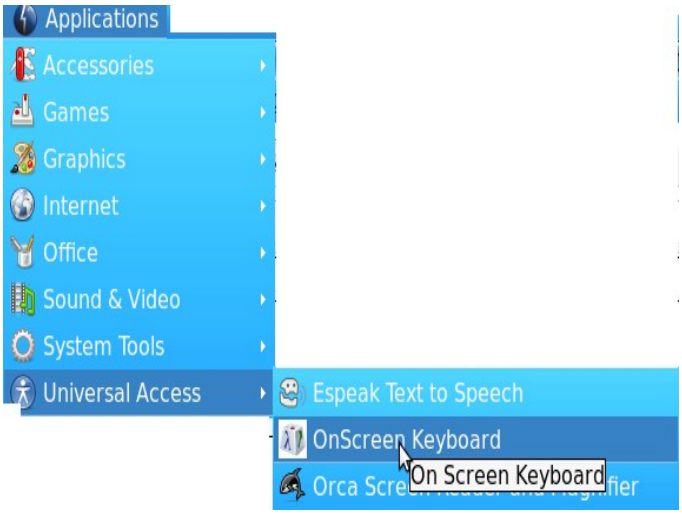
Telugu Inscript Layout

9.2 OnScreen Keyboard

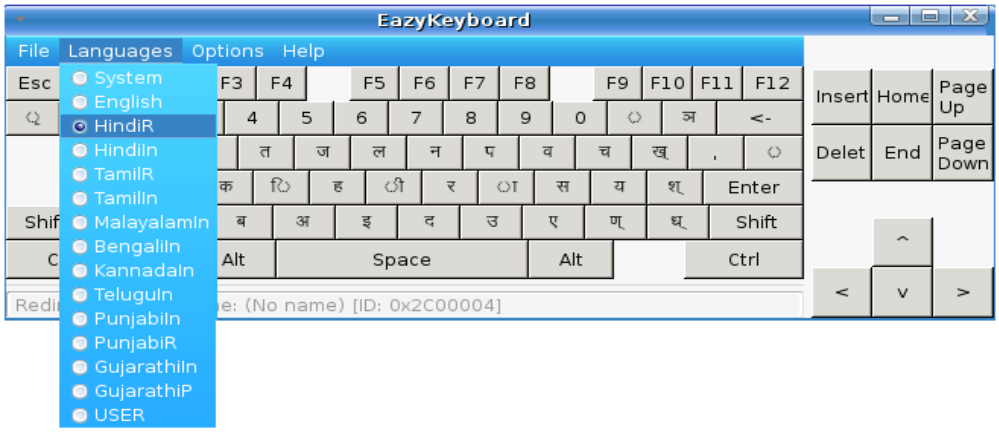
OnScreen Keyboard is a utility that displays a virtual keyboard on the computer screen that allows people with mobility impairments to type data by using a pointing device or joystick. Besides providing a minimum level of functionality for some people with mobility impairments, OnScreen Keyboard can also help people who do not know how to type. On Screen Keyboard is the other way which allows you to type in your native language and create your documentations, mails etc.

Usage of the OnScreen Keyboard

1. Start the OnScreen Keyboard through **Applications -> Accessories -> OnScreen Keyboard** or type **eazykeyboard** in terminal and press *Enter*



2.Select the language from, “Languages” menu.



The extra letters along with the language indicate the type of keyboard layout.

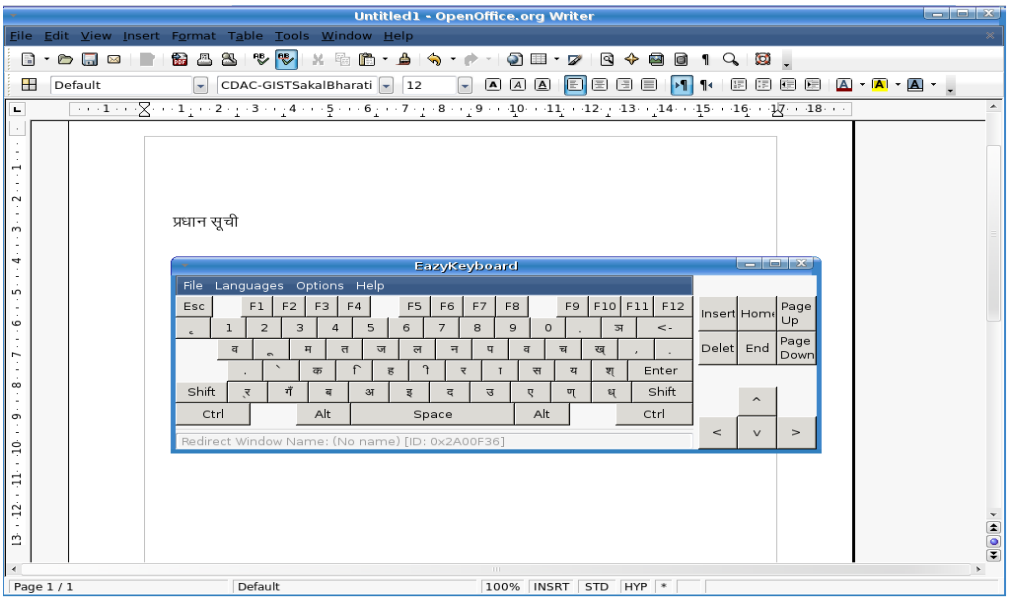
R – Remington

In – Inscript

eg: HindiR represents Hindi Remington Keyboard and HindiIn represents Hindi Inscript Keyboard

3.Type in different languages

Now you can open any of your favorite editor, and start typing in Hindi,Tamil, Malayalam, Bengali, Kannada, Telugu, Punjabi, Gujarathi languages.



Enjoy using OnScreen Keyboard

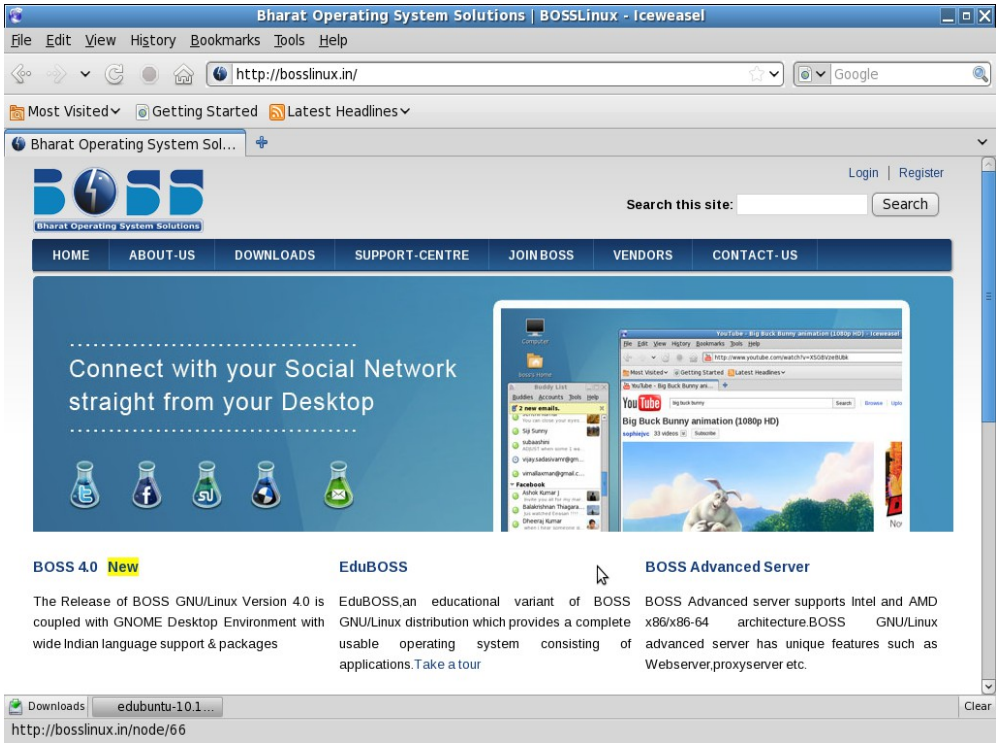
10. Internet

10.1 Browsing with Iceweasel

Included with BOSS is the Iceweasel Web browser. With features like tabs, pop-up window blocking, and download and image management, Iceweasel combines the latest Web technologies. You can view more than one Web page in a single window. You can suppress annoying advertisements and disable images that only slow you down. Its easy access to different search engines helps you find the information you need.

To start Iceweasel choose **Applications -> Internet -> Iceweasel Web Browser** or type **iceweasel** in terminal and press *Enter*.

Iceweasel has much the same look and feel as other browsers. The navigation toolbar includes Forward and Back buttons and a location bar for entering web address. Bookmarks are also available for quick access.


Bharat Operating System Solutions | BOSSLinux - Iceweasel
File Edit View History Bookmarks Tools Help
http://bosslinux.in/
Google
Most Visited
Getting Started
Latest Headlines
Bharat Operating System Sol...
Login | Register
Search this site:
Search
HOME
ABOUT-US
DOWNLOADS
SUPPORT-CENTRE
JOIN BOSS
VENDORS
CONTACT-US
Connect with your Social Network
straight from your Desktop
BOSS 4.0 New
The Release of BOSS GNU/Linux Version 4.0 is coupled with GNOME Desktop Environment with wide Indian language support & packages
EduBOSS
EduBOSS,an educational variant of BOSS GNU/Linux distribution which provides a complete usable operating system consisting of applications.Take a tour
BOSS Advanced Server
BOSS Advanced server supports Intel and AMD x86/x86-64 architecture.BOSS GNU/Linux advanced server has unique features such as Webserver,proxyserver etc.
Downloads
edubuntu-10.1....
Clear
http://bosslinux.in/node/66

10.1.1 Tabbed Browsing

If you often use more than one web page at a time, tabbed browsing may make it easier to switch between them. Load Web sites in separate tabs within one window.

To open a new tab, select **File -> New Tab**. This opens an empty tab in the Iceweasel window. Alternatively, right-click a link and select “Open link in New Tab”. Right-click the tab itself to access more tab options. You can create a new tab, reload one or all existing tabs, or close them. You can also change the sequence of the tabs by dragging and dropping them on a requested position.

10.1.2 Using the Sidebar

Use the left side of your browser window for viewing bookmarks or the browsing history. To display the Sidebar, select **View -> Sidebar** and select the desired contents.

10.1.3 Finding Information

There are two ways to find information in Iceweasel: the search bar and the find bar. The search bar looks for pages while the find bar looks for things on the current page.

10.1.3.1 Finding Information on the Web

Iceweasel has a search bar that can access different engines, like Google, Yahoo, or Amazon. For example, if you want to find information about Bharat Operating System Solutions using the current engine, click in the search bar, type Bharat Operating System Solutions and hit Enter. The results appears in your window. To choose your search engine, click the icon to the left of the search bar. A menu opens with a list of available search engines.

Installing a different Search Engine

If your favorite search engine is not listed, Iceweasel gives you the possibility to configure it. Try the following steps:

1. Establish an Internet connection first.
2. Click the icon to the left of the search bar.
3. Select “Manage Search Engines...” from the menu.
4. Click “Get more search engines...”.
5. Iceweasel displays a web page with available search engines. You can choose from Wikipedia, IMDB, Flickr, and others. Click the desired search plug-in.
6. Install your search plug-in by clicking “Add” or abort with “Cancel”.

10.1.3.2 Searching in the Current Page

To search inside a web page, click **Edit -> Find** or press *Ctrl+F*. The find bar opens. Usually, it is displayed at the bottom of a window. Type your query in the input field. Iceweasel finds the

first occurrence of this phrase. You can find other occurrences of the phrase by pressing *Ctrl+G* or “Next” button in the find bar. You can also highlight all occurrences by pressing the “Highlight all” button. Checking the “Match case” option makes the query case sensitive.

10.1.4 Managing Bookmarks

Bookmarks offer a convenient way of saving links to your favorite web sites. To add the current web site to your list of bookmarks, click **Bookmarks -> Bookmark This Page**. If your browser currently displays multiple web sites on tabs, only the URL on the currently selected tab is added to your list of bookmarks.

When adding a bookmark, you can specify an alternative name for the bookmark and select a folder where Iceweasel should store it. To bookmark web sites on multiple tabs, select “Bookmark All Tabs...”. Iceweasel creates a new folder that includes bookmarks of each site displayed on each tab. To remove a web site from the bookmarks list, click “Bookmarks”, right-click the bookmark in the list, then click “Delete”.

10.1.4.1 Using the Bookmark Manager

The bookmark manager can be used to manage the properties (name and address location) for each bookmark and organize the bookmarks into folders and sections.

To open the bookmark manager, click B**ookmark -> Organize Bookmarks....** A window opens and displays your bookmarks. With **Organize ->New Folder**, create a new folder with a name and a description. If you need a new bookmark, click **Organize -> New Bookmark...** This lets you insert the name, location, keywords, and also a description. The keyword is a shortcut to your bookmark. If you need your newly created bookmark in the sidebar, check “Load this bookmark in the sidebar”.

10.1.4.2 Importing Bookmarks from Other Browsers

If you used a different browser in the past, you probably want to use your old bookmarks in Iceweasel, too. Iceweasel allows to import bookmarks from other browsers installed on your system such as Netscape or Opera. It also allows to import bookmarks from a file exported from a browser on different computer.

To import your settings, click **File -> Import**. Select the browser from which to import settings and click “Next” or choose a file. Find your imported bookmarks in a newly created folder, beginning with “From”.

10.1.4.3 Live Bookmarks

Live bookmarks display headlines in your bookmark menu and keep you up to date with the

latest news. This enables you to save time with one glance at your favorite sites.

Many sites and blogs support this format. A Web site indicates this by showing an orange icon in the right part of the location bar. Click it and choose “Subscribe to this feed using Live Bookmarks” option. Click “Subscribe Now” in the page that opens. A dialog box opens in which to select the name and location of your live bookmark. Confirm by clicking “Add”.

10.1.5 Using the Download Manager

With the help of the download manager, keep track of your current and past downloads. To open the download manager, click **Tools -> Downloads**. Iceweasel opens a window with your downloads. While downloading a file, see a progress bar and the current file. If necessary, pause a download and resume it later. To open a downloaded file, right-click on the file and click “Open”. To Remove, select “Remove From List”.

If you need further control of the download manager, open the configuration window from **Edit -> Preferences** and go to the Main tab. Here, determine the download folder and how the manager behaves.

10.1.6 Adding Smart Keywords to Your Online Searches

Searching the Internet is one of the main tasks a browser can perform for you. Iceweasel lets you define your own smart keywords: abbreviations to use as a “command” for searching the web. For example, if you use Wikipedia often, use a smart keyword to simplify this task:

- Go to http://en.wikipedia.org.
- After Iceweasel displays the web page, see the search text field. Right-click it then choose “Add a Keyword for this Search” from the menu that opens.
- “Add Bookmark” dialog appears. In Name, name this web page, for example, Wikipedia (en).
- For Keyword, enter your abbreviation of this Web page, for example, wiki.
- With Create in, choose the location of the entry in your bookmarks section. You can put it into any folder.
- Finalize with “Add”.

You have successfully generated a new keyword. Whenever you need to look into

Wikipedia, you do not have to use the entire URL. Just type wiki Linux to view an entry about Linux.

10.1.7 Printing from Iceweasel

Configure the way Iceweasel prints the content it displays using the “Page Setup” dialog. Click **File -> Page Setup...** and select the orientation of your print jobs. You can scale or make it adjust automatically.

After you configured your settings, print a web page with **File -> Print...** Select the printer or a file in which to save the output. Change the required settings. When satisfied with your settings, approve with “Print”.

10.2 Mail Client

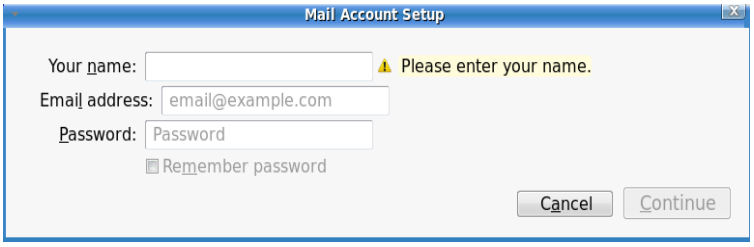
An e-mail client, also called a mail user agent (MUA), is a computer program that is used to receive and send email. Features such as storage of mails in the local system, taking backup of the mails, filtering them into filters are all well supported by our mail client, Icedove.

10.2.1 Icedove

This section briefly covers the basic steps for sending and receiving email with Icedove.

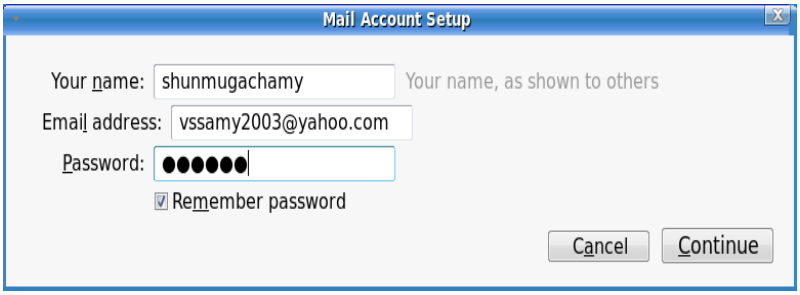
To start Icedove, choose **Applications** -> **Internet** -> **Icedove Mail Client** or type **icedove** in terminal and press *Enter*.

1. You are presented with a New Account Setup screen. Select the type of account you like to set up and click “Next” button.



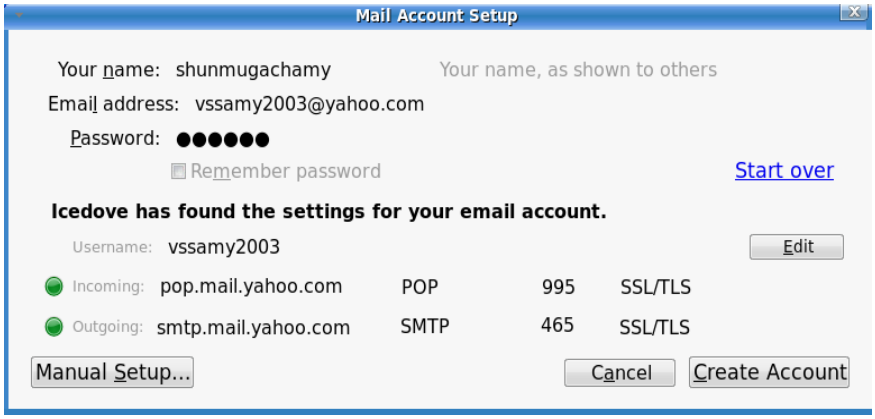
2. In “Your Name” field enter the name you like to appear in the “From” field of your outgoing messages.

   In “Email Address” field enter your email address

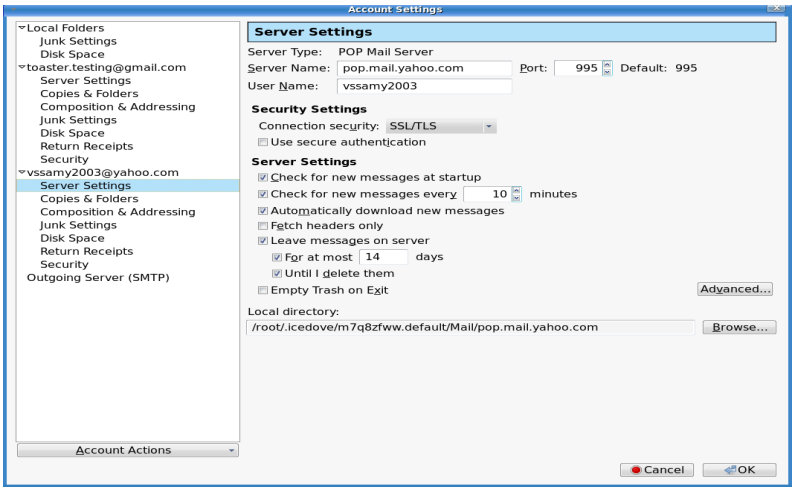


3.Enter the user name given to you by the email provider in the “Your name” field

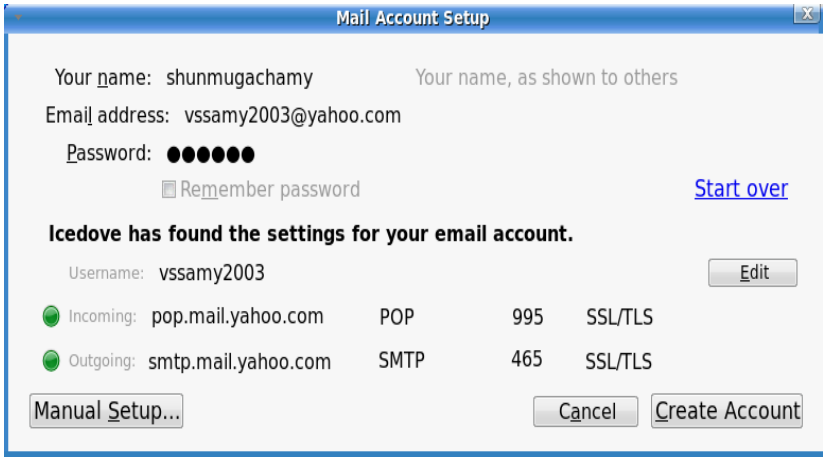
4.Automatically Ice dove will take incoming and outgoing server.



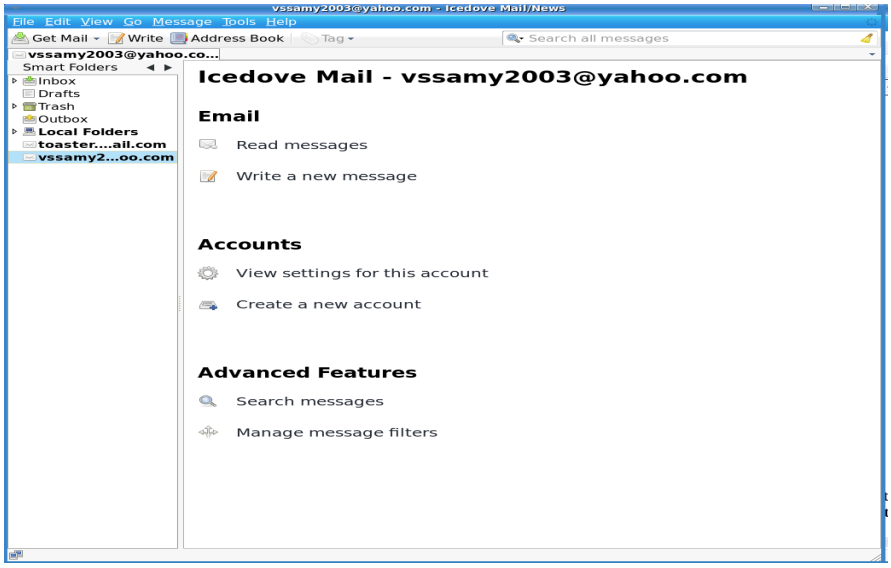
5. Manually you can specify the incoming server and outgoing server information



6.A screen showing the account information appears. Click “Create Account” to save these settings and exit the account wizard.



Now your account is created .



Now you can use your icedove mail client to view your mails and send mails with different formattings, colors, attachments etc. You can even import your address books from the outlook express or any other mail client. The procedure is as simple as the account creation.

1.Export the address book from your mail server into the icedove format. It may be .LDIF,.tab, .csv, txt.

2.Open the icedove mail client, go to **Tools -> Address Book**, which opens the address book interface.

3.Go to **Tools -> Import...**, and select "Address Books" from the wizard displayed.

4.Select the file that you have just exported into your system and click "next"

5.Now all your addresses from the address book are in your icedove.

The similar way you can take backup of addresses into a file and import in any other mail client, which supports the specified formats.

1. Icedove and Newsgroup

Newsgroups are Internet discussion groups with specific topics. The discussions are in threaded format (which means all topics and responses to the topic are sorted and organized for convenient reading) and subscribing to a group is easy. You are not required to post messages; instead, you can just *lurk*, which is a Newsgroup term for reading without posting messages. There are a great many newsgroups on the Web with topics ranging from politics to computer games to random strange thoughts. You can even post and download pictures and files to Newsgroups (although your ISP may restrict Newsgroups to text-based postings only).

To join a newsgroup, you first need to set up a newsgroup account. Click on your mail account name in the sidebar and select "Create a new account" from the options that appear on the right of the screen. The "New Account Setup" screen appears again. Select "Newsgroup account" and then click "Next".

Enter your name and email address in the blank fields and click "Next". On the following screen, enter the name of your news server (if you do not know the name of your news server, contact your Internet Service Provider or network administrator for this information). On the last few screens, you can determine the name of this account and review your settings.

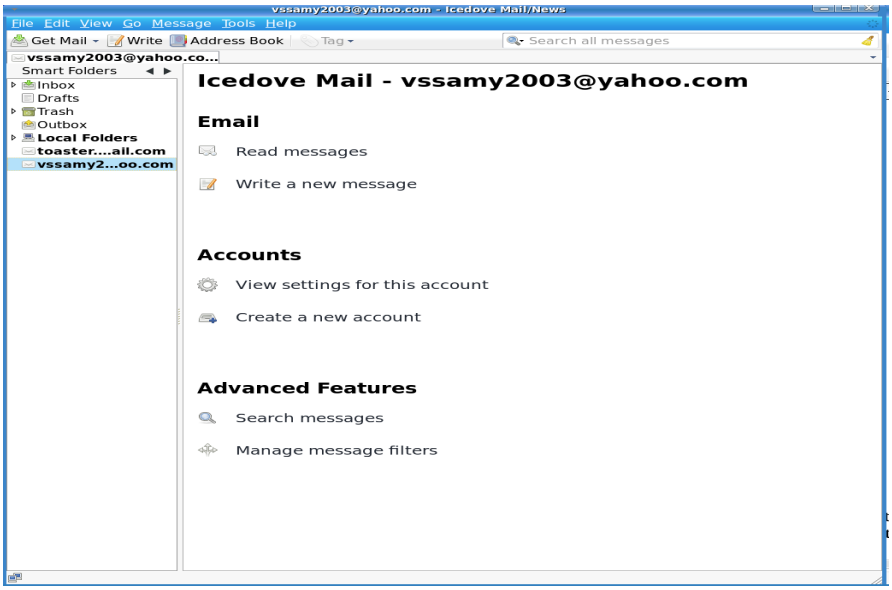
The newsgroup account you created appears in the sidebar of the icedove mail screen. Right-click on this account name and select "Subscribe...". A dialog box appears, listing all the newsgroups available. Select the groups you are interested in reading and click "Subscribe". When you are done, click on "OK".

Double-click on the newsgroup account name and the list of groups you are subscribed to appears beneath. Select the newsgroup you want to access and a dialog box appears with information about downloading and reading existing messages. Posting to a newsgroup is just like writing an email, except that the newsgroup name appears in the "To" field rather than an email address. To unsubscribe from a newsgroup, right-click on the group name and select "Unsubscribe".

2. Save the E-mails into your local system

You have “Local folders” in your icedove window, which are the folders in your local system hard disk and the content stored in these folders can be viewed when you are off-line and can save your mails in these folders to save the mail server memory space.

1.Create your own folder by right clicking on the “Local Folders” and click “New Folder...”



2.Once you have your local folders ready named as per your comfort, open your inbox in the icedove mail client, select the mails that you want to save in the local folders (use Ctrl key to select more than one mail) and right-click. It opens a menu, where you can see options like “Copy To” (copies the mails to local folders) and “Move To” (deletes the mails from the server and moves into the local folders), select that “Move To” and then the target folder where you want to move the mails to.

3.Thats it, now you have your mails stored in your local system.

3. Backup Mails and other Settings

To take the backup of your mails,address book and settings from icedove, when you reinstall the operating system or change your system, you have to take the backup of the icedove settings folder and paste it in the same location of the new Operating system.

Backup your Icedove email and other config files in the following way -

1.The files are stored in the .mozilla-thunderbird directory which resides in your home directory.

2.Assuming the home directory is /home/admin. *Please replace it with your own in the following commands -*

open the terminal and execute the following commands

[admin@spooky ~]$ tar cvfz mythund_bkp.tar.gz /home/admin/.mozilla-thunderbird/

3.The above command will create an archive named “mythund_bkp.tar.gz”

You can use this archive to restore all your files in case of any problems using the following command and your emails will be restored -

[admin@spooky ~]$ tar xvf mythund_bkp.tar.gz

4.Start Icedove and your emails will be in place. The advantage of the above method is that it not only restores emails but also your settings. So you do not have to reconfigure your IMAP mailboxes etc. Even your extensions are preserved.

10.3 Pidgin Internet Messenger

Pidgin is an instant messaging program. You can talk to your friends using AIM, ICQ, XMPP, MSN Messenger, Yahoo!, Bonjour, IRC, Novell Group Wise Messenger, QQ, SIMPLE, and Google Talk.

Pidgin can log in to multiple accounts on multiple IM networks simultaneously. This means that you can be chatting with friends on AIM, talking to a friend on Yahoo Messenger, and sitting in an IRC channel all at the same time.

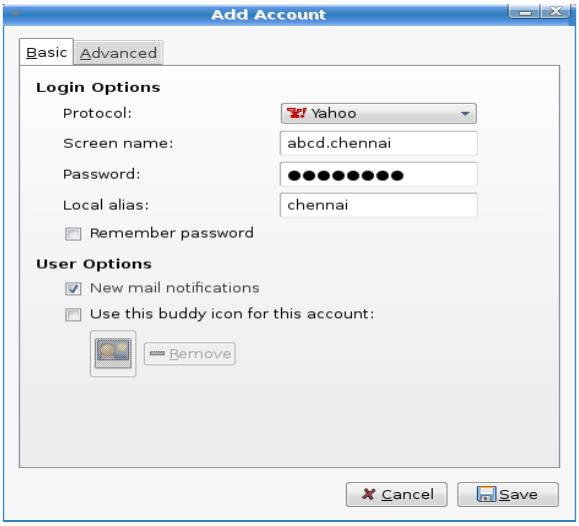
A few popular features of pidgin are Buddy Pounces, which give the ability to notify you, send a message, play a sound, or run a program when a specific buddy goes away, signs online, or returns from idle; and plugins, consisting of text replacement, a buddy ticker, extended message notification, iconify on away, spell checking, tabbed conversations, and more.

To start Pidgin Internet Messenger choose, **Applications -> Internet -> Pidgin Internet Messenger** or type **pidgin** in terminal and press *Enter.*

Accounts
Welcome to Pidgin!
You have no IM accounts configured. To start connecting with Pidgin press the Add button below and configure your first account. If you want Pidgin to connect to multiple IM accounts, press Add again to configure them all.
You can come back to this window to add, edit, or remove accounts from Accounts⇨Add/Edit in the Buddy List window
Add
Modify
Delete
Close

When you start the Internet Messenger the following window appears.

To create an account, Click the “Add” button.



For protocol, a list appears. Select the one in which you are having an account

If you are having an email-id in yahoo, select the protocol as Yahoo. For screen name specify the username. For password type the corresponding password.

If you select the New mail notifications check box, when you are in chatting if you receive any new mails in your account it will be brought to your notice.

After entering all the required details click “Save”.

Select the “Pidgin-Available” icon from the panel, the following window appears.

The text in yellow background indicates email notification.

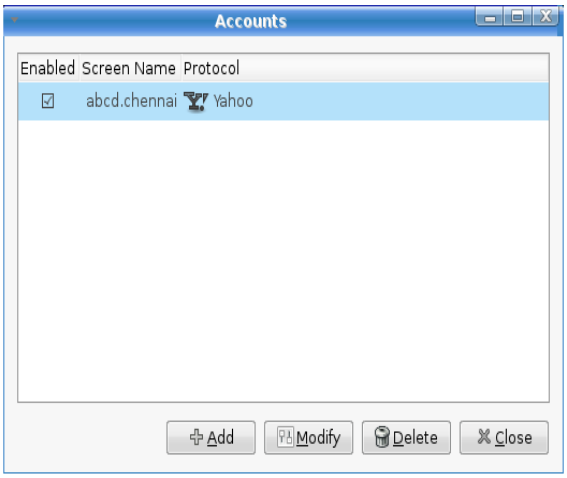
To send instant messages click **Buddies -> New Instant Message**

To join a chat click **Buddies -> Join a chat room**

If you want to add a new name to the buddies list click **Buddies -> Add Buddy**

If you want to add a new account or edit an already existing account click **Accounts -> Add/Edit**.

To edit an already existing account select the corresponding account as shown in the figure.



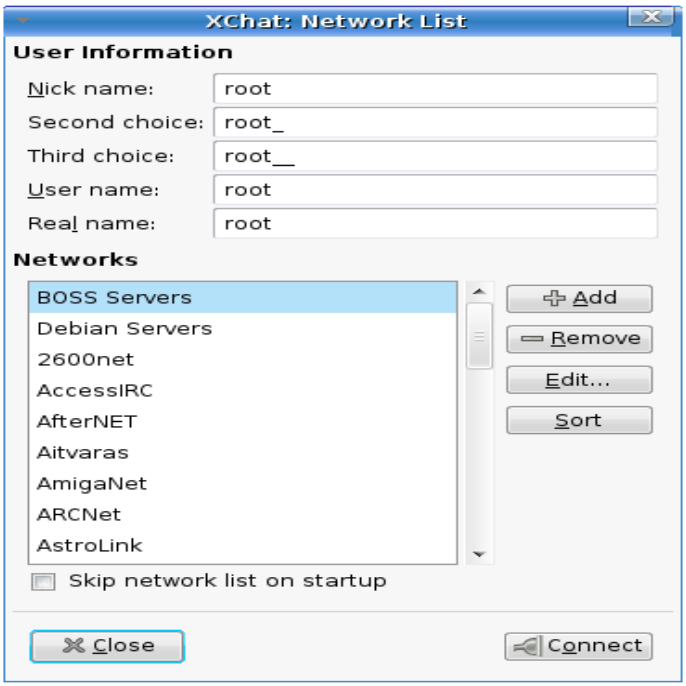
To modify or delete the account click the “Modify” or “Delete” button. To add a new account click the “Add” button.

10.4 XChat IRC

XChat is an IRC chat program for both Linux and Windows. It allows you to join multiple IRC channels (chat rooms) at the same time, talk publicly, private one-on-one conversations etc. Even file transfers are possible.

To start XChat choose **Applications -> Internet -> XChat IRC** or type **xchat** in terminal and press *Enter.*

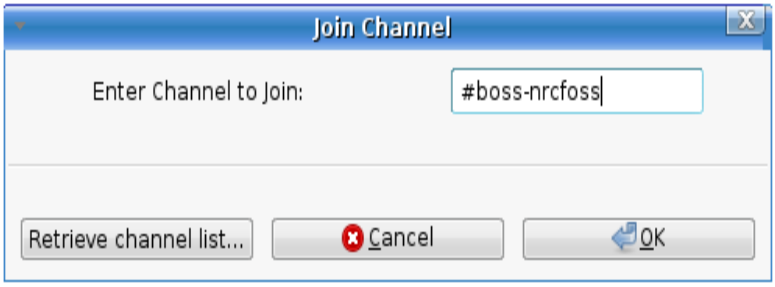
When you first start the program you'll be presented with this window:



Here you can choose your nickname, a second choice (in case it's already taken), a third choice(in case the second choice is also already taken), username and realname. The username can generally be anything you like, just make it up.

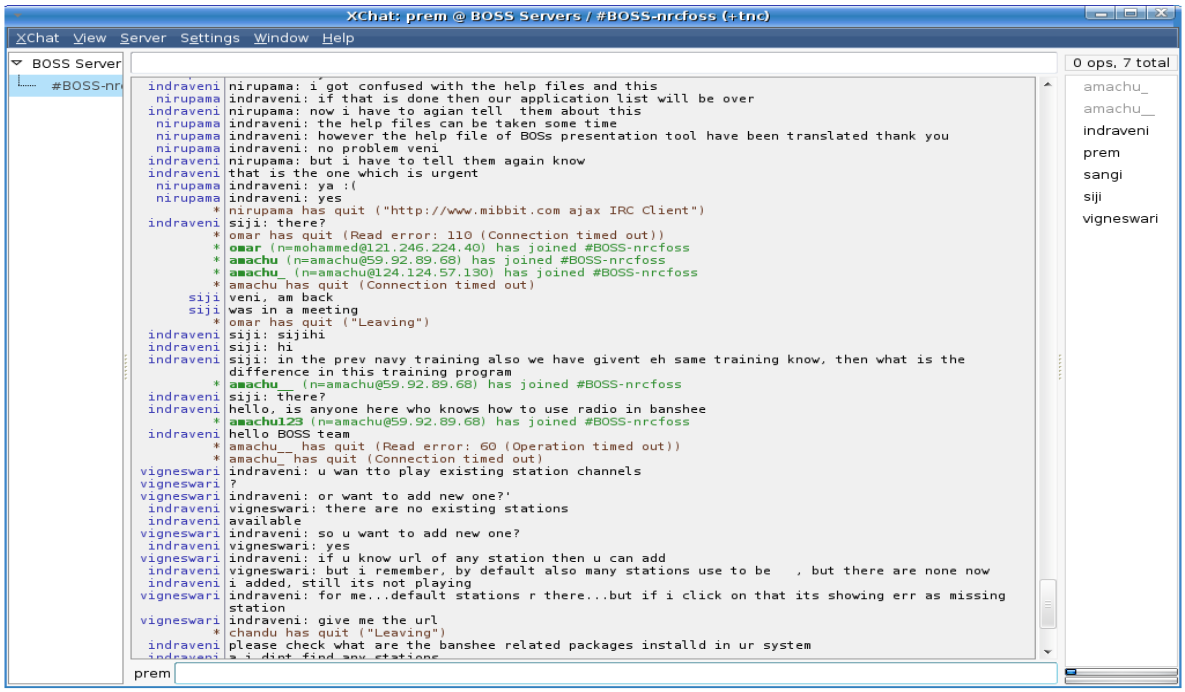
The next step is to choose a network to join. Let us see an example to join BOSS Server. Just select “BOSS Servers” and click “Connect”.

Hopefully your internet connection is working well and you've connected. By default BOSS Server will be connected to BOSS-nrcfoss channel. If the channel is not specified by default a dialog will pop-up asking you enter the channel to join.



If you know the name of the channel, type the channel name e.g. *#BOSS-nrcfoss* (IRC channels usually begin with a hash symbol), and click "*OK*". If you don't know the channel name, click "*Retrieve Channel list...*", this will open a window and list all the possible channels on this network.

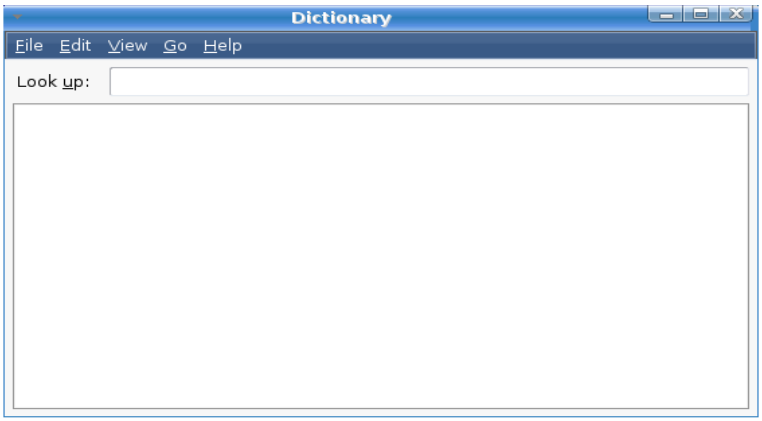
Once you've selected a channel, XChat should join it for you and you can start chatting by typing the queries in the text box at the bottom of the window.


XChat: prem @ BOSS Servers / #BOSS-nrcfoss (+tnc)
XChat View Server Settings Window Help
BOSS Server
#BOSS-nr
0 ops, 7 total
amachu_
amachu__
indraveni
prem
sangi
siji
vigneswari
indraveni nirupama: i got confused with the help files and this
nirupama indraveni: if that is done then our application list will be over
indraveni nirupama: now i have to agian tell them about this
nirupama indraveni: the help files can be taken some time
nirupama indraveni: however the help file of BOSs presentation tool have been translated thank you
nirupama indraveni: no problem veni
indraveni nirupama: but i have to tell them again know
indraveni that is the one which is urgent
nirupama indraveni: ya :(
nirupama indraveni: yes
* nirupama has quit ("http://www.mibbit.com ajax IRC Client")
indraveni siji: there?
* omar has quit (Read error: 110 (Connection timed out))
* omar (n=mohammed@121.246.224.40) has joined #BOSS-nrcfoss
* amachu (n=amachu@59.92.89.68) has joined #BOSS-nrcfoss
* amachu_ (n=amachu@124.124.57.130) has joined #BOSS-nrcfoss
* amachu has quit (Connection timed out)
siji veni, am back
siji was in a meeting
* omar has quit ("Leaving")
indraveni siji: sijihi
indraveni siji: hi
indraveni siji: in the prev navy training also we have givent eh same training know, then what is the difference in this training program
* amachu__ (n=amachu@59.92.89.68) has joined #BOSS-nrcfoss
indraveni siji: there?
indraveni hello, is anyone here who knows how to use radio in banshee
* amachu123 (n=amachu@59.92.89.68) has joined #BOSS-nrcfoss
indraveni hello BOSS team
* amachu__ has quit (Read error: 60 (Operation timed out))
* amachu_ has quit (Connection timed out)
vigneswari indraveni: u wan tto play existing station channels
vigneswari ?
vigneswari indraveni: or want to add new one?'
indraveni vigneswari: there are no existing stations
indraveni available
vigneswari indraveni: so u want to add new one?
indraveni vigneswari: yes
vigneswari indraveni: if u know url of any station then u can add
indraveni vigneswari: but i remember, by default also many stations use to be , but there are none now
indraveni i added, still its not playing
vigneswari indraveni: for me...default stations r there...but if i click on that its showing err as missing station
vigneswari indraveni: give me the url
* chandu has quit ("Leaving")
indraveni please check what are the banshee related packages installd in ur system
prem

10.5 Dictionary

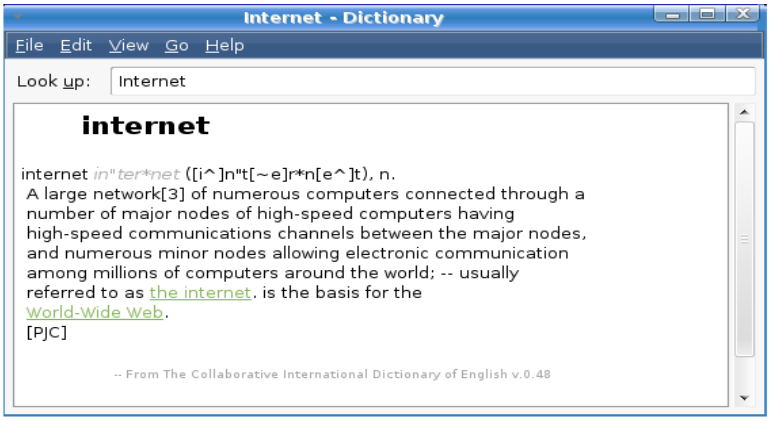
The Dictionary application enables you to search words and terms on a dictionary source.

To start dictionary choose, **Applications -> Accessories -> Dictionary** or type **gnome-dictionary** in terminal and press *Enter.*



Looking up a word

To look up a word, type that word in the text box and press *Enter*. If some definition for the word is found, it will appear inside the main window area.


Internet - Dictionary
File Edit View Go Help
Look up: Internet
internet
internet in"ter*net ([i^]n"t[~e]r*n[e^]t), n.
A large network[3] of numerous computers connected through a number of major nodes of high-speed computers having high-speed communications channels between the major nodes, and numerous minor nodes allowing electronic communication among millions of computers around the world; -- usually referred to as the internet. is the basis for the World-Wide Web.
[PJC]
-- From The Collaborative International Dictionary of English v.0.48

Saving the result of the word

To save the results of the word, choose **File -> Save a Copy...**

Printing the result of the word

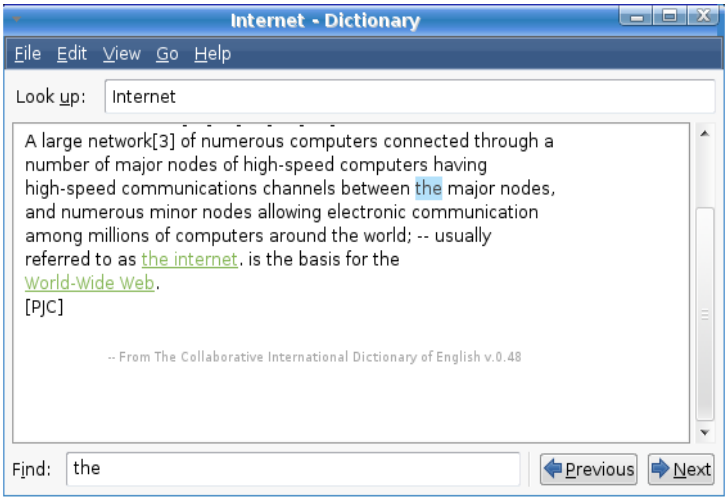
To print the result of the word, choose **File -> Print...**

Inside the Print dialog you can select the printer to use, the paper format, the number of copies.

To see a preview of what will be printed, click “Preview”.

To print, click “Print”.

Find text


Internet - Dictionary
File Edit View Go Help
Look up: Internet
A large network[3] of numerous computers connected through a number of major nodes of high-speed computers having high-speed communications channels between the major nodes, and numerous minor nodes allowing electronic communication among millions of computers around the world; -- usually referred to as the internet, is the basis for the World-Wide Web.
[PJC]
-- From The Collaborative International Dictionary of English v.0.48
Find: the
Previous
Next

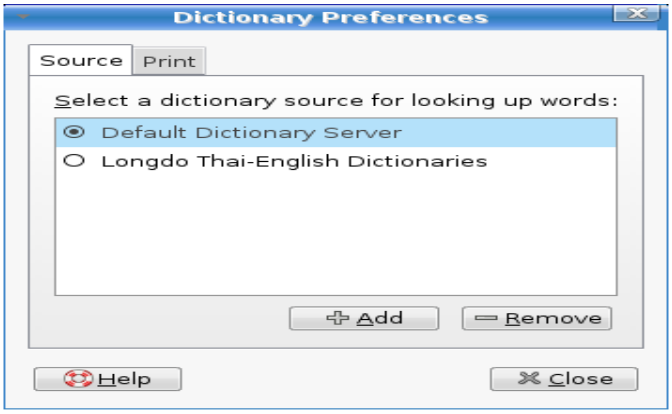
To find out a particular word from the displayed result, choose **Edit -> Find**. In the bottom a text box appears. In that type the word to find.

To find the next occurrence of the text, click “Next”.

To find the previous occurrence of the text, click “Previous”.

Dictionary Sources

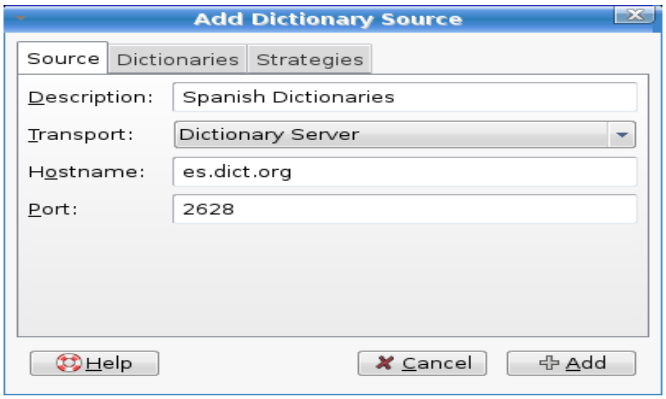
To view dictionary sources click **Edit -> Preferences**



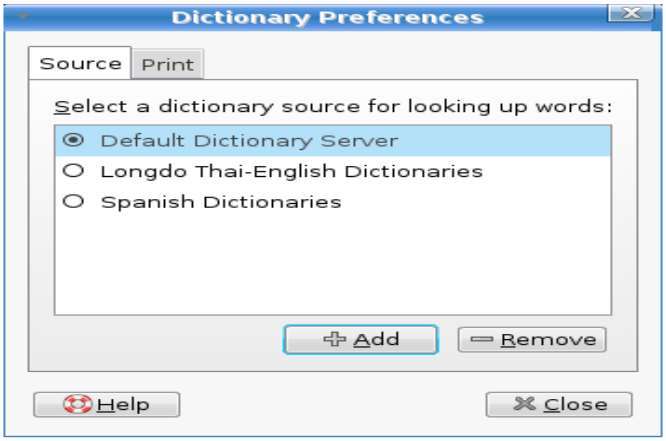
A list of available sources will be displayed. Click on the source from which you want to look up words.

Adding a new dictionary source

To add a new source click the “Add” button in the “Dictionary Preferences” window.



Once you click “Add” the new source will be added to the list.



In the figure given above we can see that “Spanish Dictionaries” is added to the list.

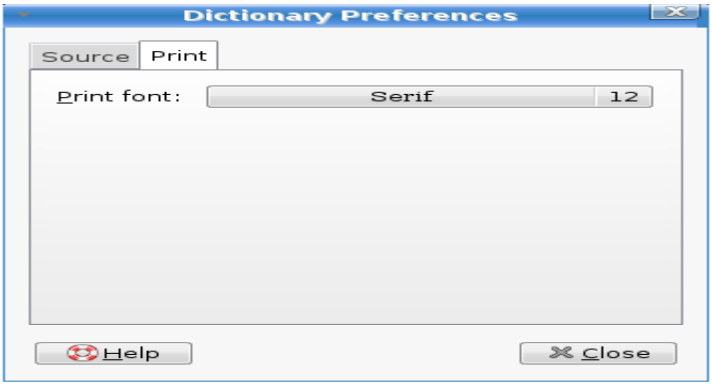
Removing a dictionary source

Select the source you want to remove and click “Remove” button. A confirmation dialog appears. In that click “Remove”.

Print Options

To change the print options, choose **Edit -> Preferences.** In the window that appears click on

“Print”.

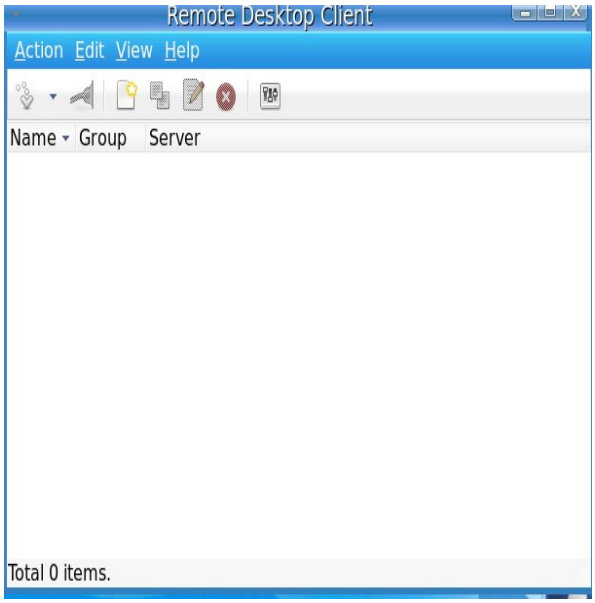


To change the font name and size of the text click the “Print font” button.

10.6 Remmina Remote Desktop Client

Remmina is a remote desktop client written in GTK+, aiming to be useful for system administrators and travellers, who need to work with lots of remote computers in front of either large monitors or tiny netbooks. Remmina supports multiple network protocols in an integrated and consistant user interface. Currently RDP, VNC, XDMCP and SSH are supported.

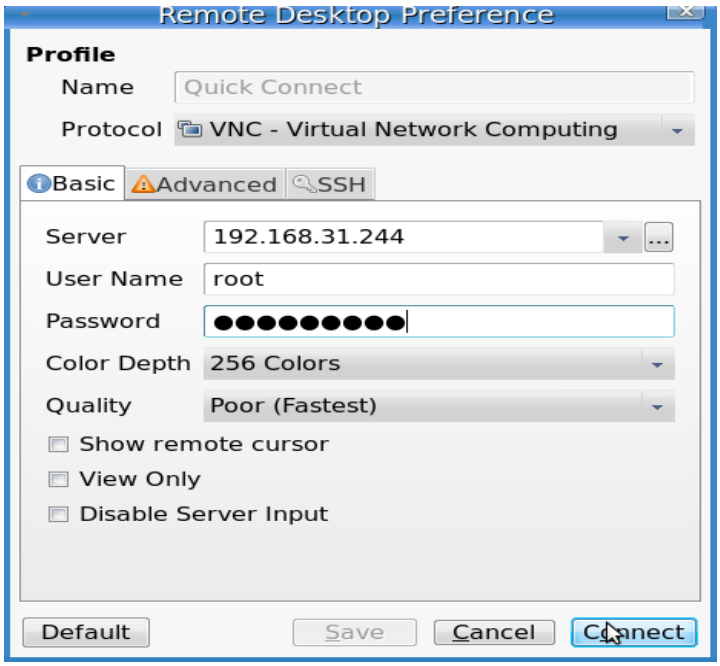
To start dictionary choose, **Applications -> Internet -> Remmina Remote Desktop Client** or type **remmina** in terminal and press *Enter*.



Select the protocol to connecting to the remote system.

VNC -Virutal Network Computing

Select protocol VNC -Virtual Networking then select server address and enter . Give remote desktop user name and password to connect.



10.7 Ekiga Sofphone

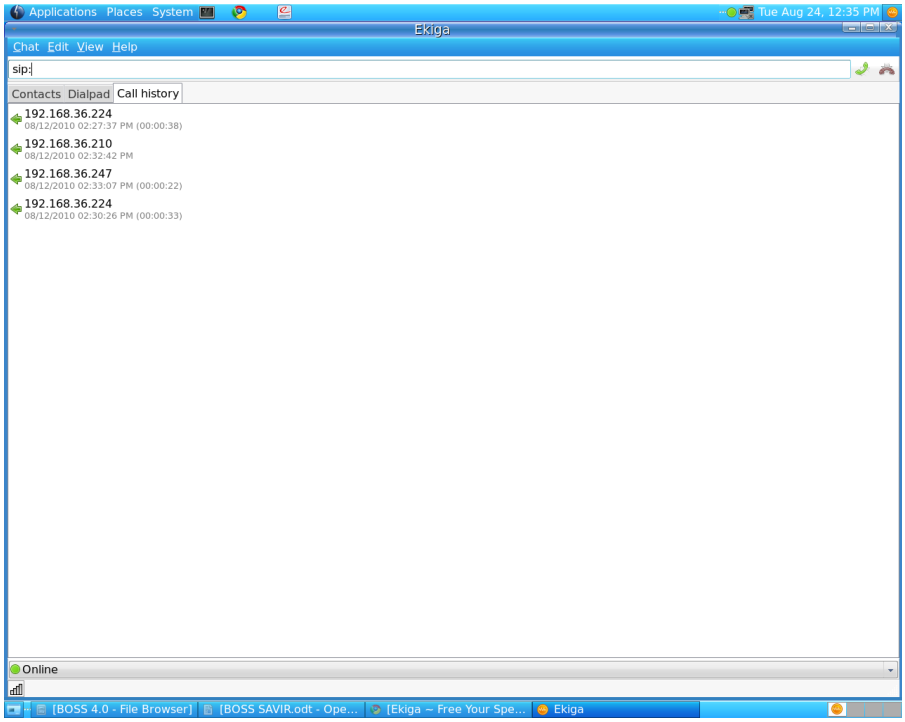
Ekiga (formely known as GnomeMeeting) is an open source **SoftPhone**, **Video Conferencing** and **Instant Messenger** application over the Internet.

It supports sound quality and video up to DVD size and quality.
It is with many other standard compliant softwares, hardwares and service providers as it uses both the major **telephony standards**.

Ekiga Softphone is a free Voice over IP, commonly VoIP or internet telephony, service provider.

Using VoIP is like using electronic mails:

- You need an address. That's mainly what Ekiga.net is for: giving free SIP-Addresses.
- You need a software to use this address. Any SIP aware software will do, but we recommend our free Ekiga softphone, which has Instant-Messaging, Audio and Video built.

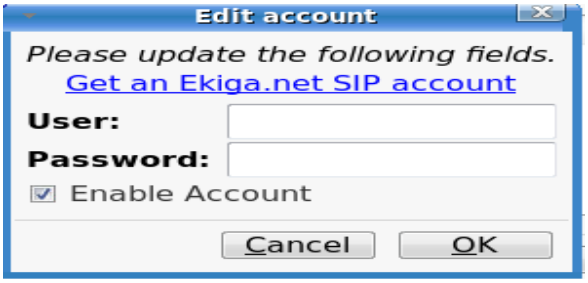


10.7.1 Ekiga account creation

Ekiga .net account

Ekiga.net is a free SIP services platform provided to *Ekiga* users. If you want to call

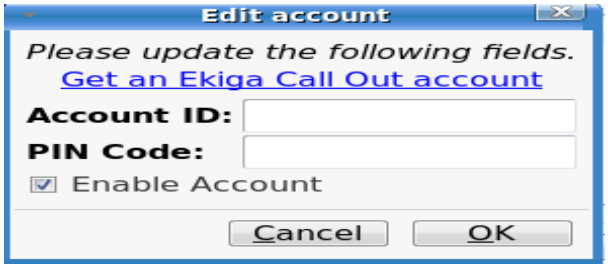
other users and to be callable, you need a SIP address. You can get one from http://www.ekiga.net. Ekiga.net also offers additional services like conference rooms, voice mail or online white pages.



Ekiga Call Account

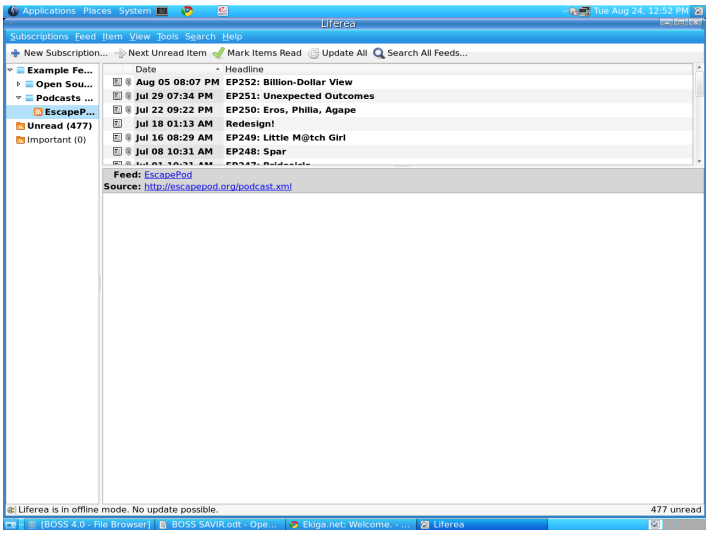
Ekiga can be used with several Internet Telephony Service Providers.

simply create an account using the "Get an Ekiga Call Out account" link. Once the account has been created, you will receive a login and a password by e-mail. Simply enter them in the dialog, and you are ready to call regular phones using *Ekiga*.



10.8 Liferea- Desktop News Aggregator

Liferea is a simple desktop news aggregator for online news feeds. There are many other news readers available, but these others are not available for Linux or require many extra libraries to be installed. Liferea tries to fill this gap by creating a fast, easy to use, easy to install news aggregator for GTK/GNOME.

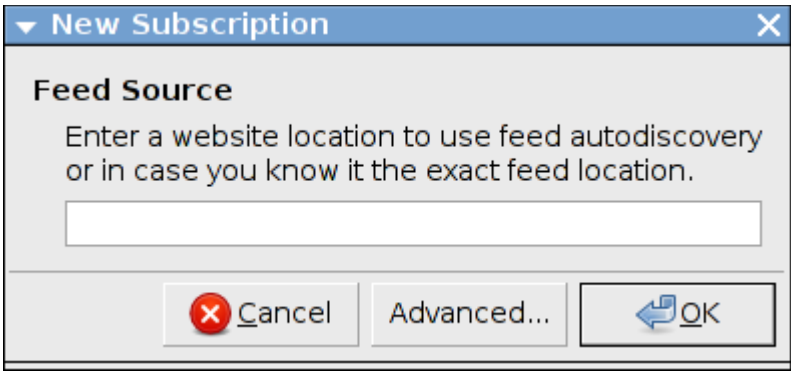

Liferea
Subscriptions Feed Item View Tools Search Help
New Subscription... Next Unread Item Mark Items Read Update All Search All Feeds...
Example Fe...
Open Sou...
Podcasts ...
EscapeP...
Unread (477)
Important (0)
Date Headline
Aug 05 08:07 PM EP252: Billion-Dollar View
Jul 29 07:34 PM EP251: Unexpected Outcomes
Jul 22 09:22 PM EP250: Eros, Philia, Agape
Jul 18 01:13 AM Redesign!
Jul 16 08:29 AM EP249: Little M@tch Girl
Jul 08 10:31 AM EP248: Spar
Feed: EscapePod
Source: http://escapepod.org/podcast.xml
Liferea is in offline mode. No update possible.
477 unread

10.8.1 Subscribe Feed

As a news aggregator Liferea allows you to subscribe to different syndication sources. The most common use case is to subscribe to single feeds. But Liferea also supports subscribing a source that provides a collection of feeds. So you can subscribe to:

- a single feed
- any OPML source (a planet feed list, a blog roll...)
- a Blogline subscription list
- a Google Readersubscription list

To create a new feed subscription select "New Feed" from the feed list's contextual menu or the "Subscriptions" menu. A dialog to create a new subscription will appear.


New Subscription
Feed Source
Enter a website location to use feed autodiscovery or in case you know it the exact feed location.
Cancel
Advanced...
OK

10.8.2 Searching Feed Content

Searching for Feed Content

Liferea supports a simple case sensitive text searching in the item content and titles of all your subscriptions.

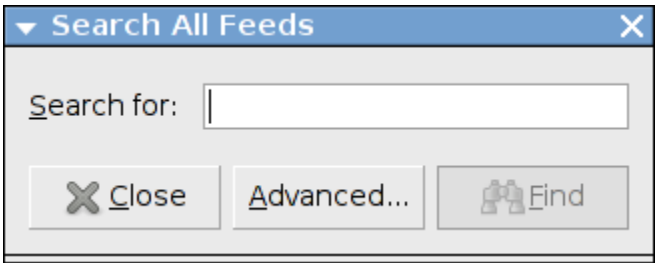
To open the search dialog click the search button in the toolbar. Enter the string you want to search for and click the "Search" button. Any items containing the string either in their title or their content should appear in the resulting item list. Also the item content view will give you a message about the number of matches.

Permanent Searches with Search Folders

If you want to have permanent searches you can create a search folder which will be added to your feed list and contains all items matching this search rule.

To do so enter your search term into the search box and click the search button. After the results appear click the "Search Folder" button to create a search folder from the search results.

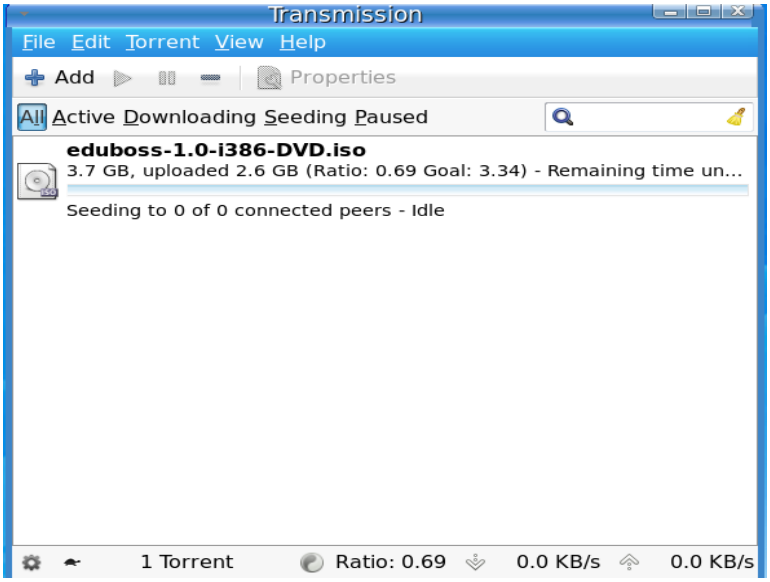
Now a search folder should appear in your feed list. If you want you can edit the search folders



title or change its rules by opening the properties dialog either from the "Subscriptions" menu or the contextual menu in the feed list.

10.9 Transmission Bit Torrent Client

Transmission is a BitTorrent client. It is used for peer to peer filesharing over the internet. BitTorrent is a fast way of transferring files, because everyone who downloads must also upload to others. This means speeds are only limited by the number of people connected to a given torrent - the more people the better.



Downloading a file

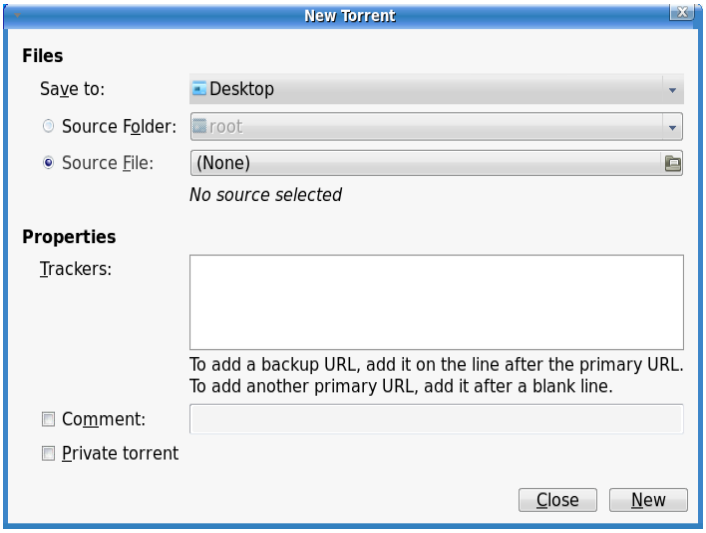
download the associated torrent file have .torrent extension.

Once downloaded click open or double click on torrent file the download start immediately.

You can pause and resume transfers at any time, so long as the files remain in your download folder.

Creating Torrent File

To create a torrent file click **File->New...** then shows following **New Torrent** Wizard.



Select option folder or source file to create the torrent.

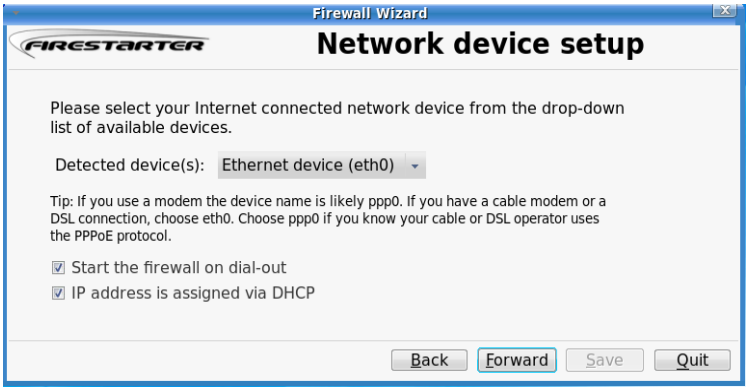
When the dialog box appears, choose your file/folder and enter your tracker address, comments and private status.

Once you are done, click 'New'. Transmission will automatically optimize the torrent file for what you are sharing

10.10 Firestarter

Firestarter is an Open Source visual firewall program. The software aims to combine ease of use with powerful features, therefore serving both Linux desktop users and system administrators.

To start **firestarter** choose, **Applications -> Internet -> firestarter** or type **firestarter** in terminal and press *Enter*.


Firewall Wizard
FIRESTARTER
Network device setup
Please select your Internet connected network device from the drop-down list of available devices.
Detected device(s):
Ethernet device (eth0)
Tip: If you use a modem the device name is likely ppp0. If you have a cable modem or a DSL connection, choose eth0. Choose ppp0 if you know your cable or DSL operator uses the PPPoE protocol.
Start the firewall on dial-out
IP address is assigned via DHCP
Back
Forward
Save
Quit

The Firestarter firewall wizard is automatically launched when you start the program the first time.

Start the firewall on dial out

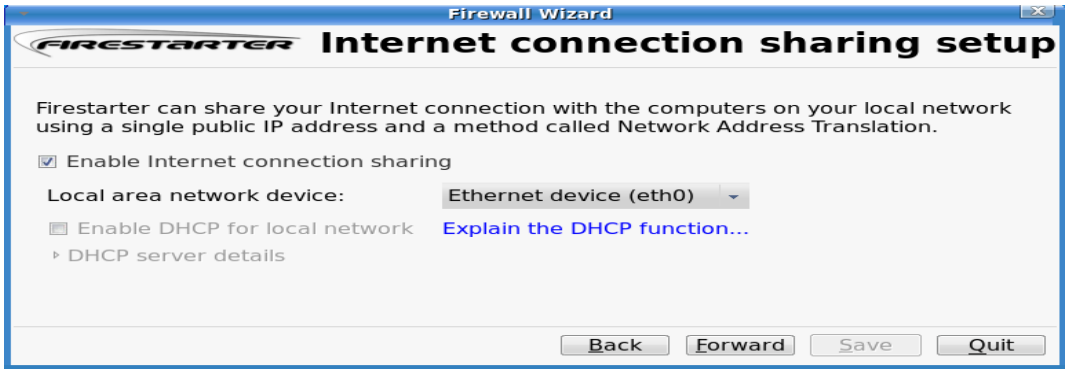
If you have a dialup (PPP) device or a VPN interface where the connection will be down occasionally, you should select this option. When enabled, Firestarter will try to reload the firewall as soon as the connection is established.

IP Address is assigned via DHCP

If your network settings such as the IP address of you computer is distributed via DHCP, you should enable this option. If you are connecting to the Internet using a cable, DSL or direct Ethernet connection you should almost always select this option. It is perfectly safe to select this option even if there is no DHCP server on your network. With this option enabled, Firestarter will reload the firewall when your network settings change.

10.10.1 Internet Connection Sharing Setup

Internet connection sharing allows several machines to access the Internet trough a single network connection. This is done using NAT. To the outside world the group of machines will look like a single machine with a single IP address.


Firewall Wizard
FIRESTARTER
Internet connection sharing setup
Firestarter can share your Internet connection with the computers on your local network using a single public IP address and a method called Network Address Translation.
Enable Internet connection sharing
Local area network device:
Ethernet device (eth0)
Enable DHCP for local network
Explain the DHCP function...
DHCP server details
Back
Forward
Save
Quit

At the final page you have to option to either discard your changes or accept and save your choices. As soon as you click save, the firewall is started.

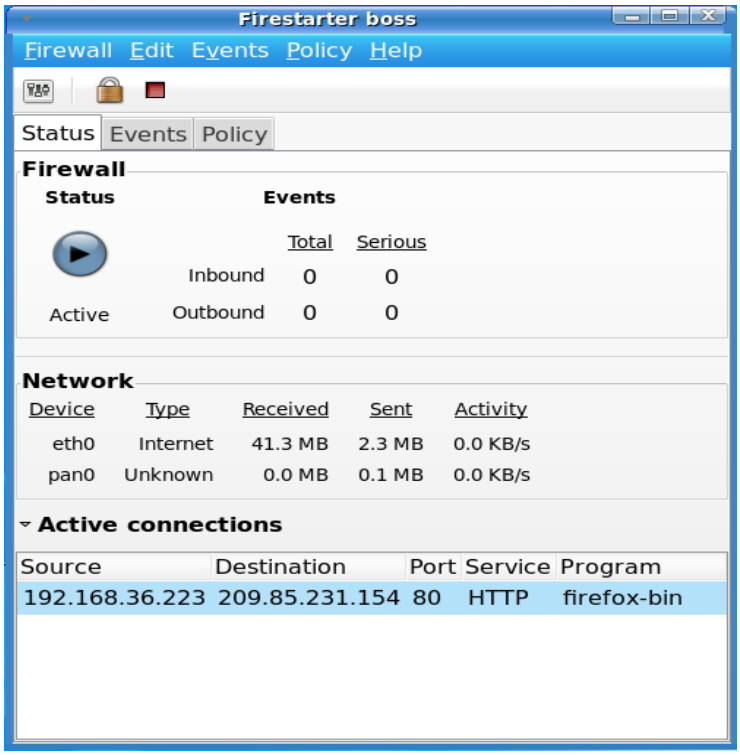
The status page is the first page you see when you start up Firestarter

Active
The firewall is enabled and working.

Disabled
The firewall has been stopped. In this state the security policy is not being enforced, all

connections are accepted.

Locked
The firewall is in a state of lock-down. Nothing is allowed through the firewall, neither in nor out.



The **network** section of the **status** page gives you an overview of the network resource usage.

Active connections is a view into the firewall engine itself. It lists every established connection the firewall is tracking at any given moment. These connections include incoming traffic to the firewall as well as outgoing connections and the programs they are associated with.

11. Graphics

11.1 Document Viewer

The Evince Document Viewer application enables you to view documents of various formats like Portable Document Format (PDF) files and Post Script files.

To start document viewer, choose **Applications -> Graphics -> Document Viewer** or type **evince** in terminal and press *Enter*.

The Evince Document Viewer window contains the following elements:

Opening a document

To open a document choose **File -> Open....** Choose the name of the file you want to open and click “Open”. The name of the document will be displayed in the title bar of the viewer. The contents of the document will be displayed in the display area.

Navigating through the document

1.To view the next page do any one of the following:

➢Choose **Go -> Next Page**

➢Click “Next” button in the toolbar.

2.To view the previous page do any one of the following:

➢Choose **Go -> Previous Page**

➢Click “Previous” button in the toolbar.

3.To view the first page in the document Choose **Go -> First Page**

4.To view the last page in the document Choose **Go -> Last Page**

5.To view a particular page, enter the page number in the “Select Page” text box on the toolbar, then press *Enter*.

Changing the page size

1. To increase the page size, choose **View -> Zoom In**. Short cut key is *Ctrl++*
2. To decrease the page size, choose **View -> Zoom Out**. Short cut key is *Ctrl+-*
3. To resize a page to have the same width as the Evince Document Viewer display area, choose **View -> Fit Page Width.**
4. To resize a page to fit within the Evince Document Viewer display area, choose **View -> Best Fit.**
5. To resize the Evince Document Viewer window to have the same width and height as the screen, choose **View -> Full Screen**. To resize the Evince Document Viewer window to the original size, click on the “Leave Full Screen” button.

Viewing the Pages or Document Structure

To view any page, perform the following steps:

1. Choose **View -> Side Pane** or press *F9*.
2. Use the drop-down list in the side-pane header to select whether to display document structure or pages in the side pane.
3. Use the side-pane scrollbars to display the required item or page in the side pane. Click on an entry to navigate to that location in the document. Click on a page to navigate to that page in the document.

Viewing the Properties of a Document

To view the properties of a document, choose **File -> Properties.** Short cut key is *Alt+Enter*.

The Properties dialog displays all information available.

Printing the document

To print the document, choose **File -> Print**

Copying the document

To copy a file, perform the following steps:

1. Choose **File -> Save a Copy...**
2. Select the location where you want to save the file and give a new name for the copy.
3. Click “Save”.

Working With Password-Protected Documents

An author can use the following password levels to protect a document:

•User password that allows others only to read the document.

•Master password that allows others to perform additional actions, such as print the document.

When you try to open a password-protected document, Evince Document Viewer displays a security dialog. Type either the user password or the master password in the “Enter document password” text box, then click “Open Document”.

Closing the document

To close the document, choose **File -> Close**

11.2 F-Spot Photo Manager

To open F-Spot choose **Applications → Graphics → F-Spot Photo Manager** or type **f-spot** in terminal and press *Enter.*

11.2.1 Organizing your photos

Import

You can import photos from your hard drive or your camera. When you import your photos into F-Spot from your camera, it will always make a copy of them, leaving you free to clear your camera's memory. By default, F-Spot will make a copy of photos imported from your hard drive. Uncheck the Copy option on the import dialog or hold Shift when dragging photos into F-Spot if you do not wish to copy them from your hard drive.

To import photos, choose **Photos → Import...** or click the “Import” button in the toolbar.

By default, F-Spot copies your photos to the ~/Photos folder. You can change the folder F-Spot uses in Preferences dialog (Edit ▸ Preferences).

Edit

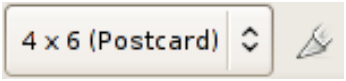
If you double click or press enter on an image, you enter Edit mode, where you can remove red-eye, crop, and adjust brightness and colors.

Versions

When you edit your photos, a new copy (called a version) is created, so your original is never altered. After your first edit a photo, subsequent edits will modify the same version. If you want to create mulitple versions of your photo, perhaps with different cropping or coloring, you can do so via the **Photo -> Create New Version...** option.

Crop

Cropping an image is a great way to improve the quality of a photograph by improving how it is framed. You crop a photo by selecting the part of the photo you want to keep. If you want your photo to be the exact dimensions necessary for a certain print size, you can constrain the kind of selection. F-Spot will allow you to draw by choosing the appropriate size from the constraint drop down.



Once you have made your crop selection, you must click the crop button beneath the image to finalize the crop. If you are working with the original photo, cropping creates a new version your photo.

Straighten

Straighten effect is a tool to level a photo.

This tool rotates an image by a specified angle and automatically crops the resulted image, so that you always see a perfect rectangle.

Adjust Colors

To adjust the brightness, contrast, and colors of a photo, first click the "**Adjust the photo colors**" icon to open the "Adjust Color" dialog. Change then some settings and save them with OK.

AutoColor

This effect automatically adjusts color levels to make a pretty balanced picture color-wise. It serves best for pictures taken with automatical white balance, when camera didn't manage to do the job well.

Desaturate

To make a colorful photo a black and white one, open a photo of choice and press Desaturate button.

Sepia

To make a colorful photo look like an old-style picture in sepia tones, open a photo of choice and press Sepia button.

Remove Red-Eye

To remove redeye from a photo, you need to select a zone containing the eyes. You may want to zoom in on the image to accurately select the eyes in the photo. You should be able to correct both eyes on the same person in one shot, or even the eyes from multiple people at once. If this doesn't work for you, or the selected zone contains some vivid red parts (lips, ...) you'll probably have to correct one red eye at a time.

To make your selection, click one corner of the rectangle that will be your selection, and drag your mouse to the diagonal corner and release it. You can resize your selection by dragging its edges, and you can move it by clicking in the middle of it and dragging it to where you want it.

Once you have selected a zone, you can remove the red from it by clicking the red-eye button beneath the photo.

Soft Focus

In photography sharpening one region of a picture, while blurring all the rest, is a way to make an emphasis and grab attention. It is achieved by using a lens that allows shooting with a short distance in front of and beyond the subject that appears to be in focus. Soft focus effect is a way to emulate such a lens.

Click to choose central point of the area you want to be in focus and adjust amount of blurring, then click OK.

Sharpen

Out-of-focus photographs and most digitized images often need a sharpness correction. The Unsharp Mask effect sharpens edges of the elements without increasing noise or blemish. To sharpen a photo choose **Edit -> Sharpen...** and specify the following values:

•Amount — strength of sharpening.

•Radius — how many pixels on either side of an edge will be affected by sharpening. High resolution images allow higher radius.

•Threshold — the minimum difference in pixel values that indicates an edge where sharpen must be applied. This helps avoiding creation of blemishes in face, sky or water surface.

Describe

You can also enter a description of the image by clicking on the text entry box below the image and typing.

Adjust Time

In both 'browse' or 'edit' modes, you can adjust the time of one or multiple pictures (**Edit -> Adjust Time**).

Tag

F-Spot enables you to organize and enjoy your photos by associating them with various user-customizable tags. A tag is a merely a label. F-Spot comes with default tags to get you started. You are free to change them and add new ones. For example, if you want to create a tag for specific event, you can create a new tag named after that event under the Events tag.

There are many ways to tag photos:

•drag and drop the photo(s) onto the tag

•drag and drop the tag onto the photo(s)

•via the photo's right-click menu

•via the Tags and Edit menus

•by typing them in (press t to pop up the tag entry bar, enter comma-separated tags) - with tab completion!

The first photo you associate with a tag will be used for that tag's icon. You can always edit a tag's name, parent tag, and icon by right clicking on it and choosing Edit tag.

You can change a tag's parent by dragging and dropping it where you like. Also, you can edit

the name of a tag by selecting it and pressing F2. Lastly, if you have the tag tree widget focused (e.g. you just clicked on a tag), you can start typing the name of a tag, and all the expanded tags in the list will be searched and you'll jump to any matching ones.

You can also change size of tag icons in the sidebar or even make tag icons invisible by selecting preferred option from **View -> Tag** Icons menu.

11.2.2 Enjoying your photos

Browse

You can use the slider widget to browse your photos by month or by directory. To change this setting, go to **View -> Arranged By**.

Fullscreen Mode and Slideshows

For fewer distractions and larger display, you can view your photos in full screen mode. You control when to show the next photo or to return to the previous. Enter fullscreen mode by pressing F11 at any time or by pressing the button in the toolbar.

In slideshow mode, you can sit back and view your photos as they are presented to you. You can start a slideshow by pressing the button on the toolbar.

11.2.3 Sharing your photos

There are many ways to share your photos using F-Spot. All of the following methods will only share the photos you have selected when you run them.

E-mail

E-mail your photos directly from F-Spot with the **Photo -> Send by Mail...** menu.

Print

Print your photos with the **Photo -> Print** menu.

Burn to CD

Burn your photos to CD or DVD with the **Photo -> Export to -> CD...** menu.

Post photos to your online galleries

If you use Flickr, SmugMug, 23hq or Picasa Web Album, you can post your files directly from F-Spot with the **Photo -> Export to** menu, choosing corresponding submenu item.

11.3 Image Viewer

eog is an image viewer and browser written for the GNOME environment. It lets you browse your hard disk, showing you thumbnails of image files and view single images of many different formats.

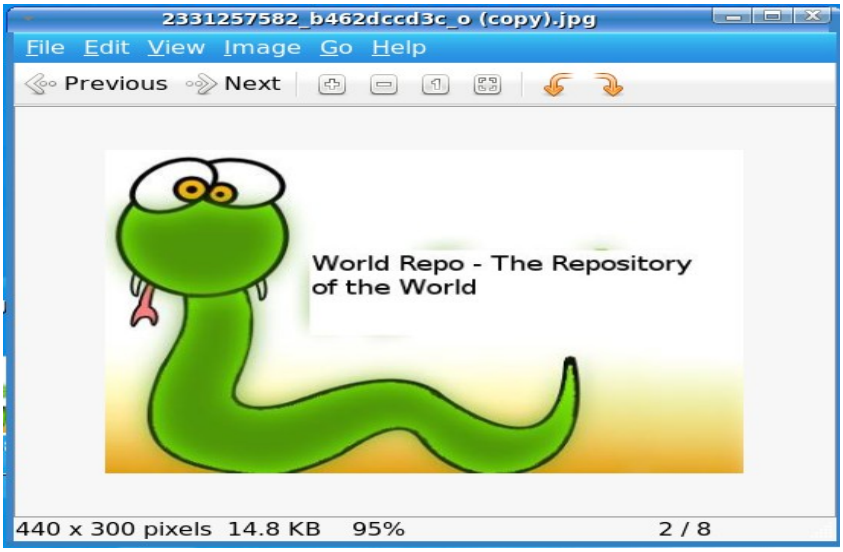
The most common image formats are JPEG and GIF. The JPEG format is good for medium and big sized images because it has a high compression rate keeping a good image quality. The GIF format is used in Web pages for displaying little animations or little static images.

Another important image format is PNG, this format is very common on Unix platforms and is considered a replacement of the GIF format.

eog supports all this formats and many others, it also displays GIF animations.

eog not only lets you view image files but has many other features such as add comments to images, organize images in catalogs, print images, view slide shows, set your desktop background, and more.

To start Image Viewer choose **Applications -> Graphics -> Image Viewer** or type **eog** in terminal and press *Enter*.


2331257582_b462dccd3c_o (copy).jpg
File Edit View Image Go Help
Previous Next
World Repo - The Repository of the World
440 x 300 pixels 14.8 KB 95% 2 / 8

11.3.1 Viewing Images

In order to view an image just click on its thumbnail and the image will be visualized in the viewer pane. If the image doesn't fit the viewer pane you can give more space to the viewer hiding the browser, this can be accomplished by double-clicking on the thumbnails or pressing the Return key, pressing it again the browser will be displayed again.

Another way of viewing a big image is to view it in full screen mode. Type *F11* to

activate/deactivate the full screen mode.

To zoom in, **Ctrl++** or **+**. To zoom out, **Ctrl+-** or **-**. To go back to the normal size,**Ctrl+0** or**1**. To scale the image to fit the window, press **F**.

Open the image collection by choosing **View ->Image Collection** or pressing **F9.**

The collection shows thumbnails of all supported images in the folder. You can browse the images by clicking on an image in the collection, by choosing the appropriate option in the **Go** menu or by pressing **Alt+Left** or **Alt+Right**.

11.3.2 Manipulating Images

To flip an image along the horizontal axis of the image, choose **Image → Flip Horizontal**.

To flip an image along the vertical axis of the image, choose **Image→ Flip Vertical.**

Rotation

To rotate an image 90 degrees in a clockwise direction, choose **Image ->Rotate Clockwise.**

To rotate an image 90 degrees in an anticlockwise direction, choose **Image->Rotate Counter Clockwise.**
To undo a flip or rotate action, choose **Edit ->Undo** or press **Ctrl+Z**

To move an image to the Trash, choose **Edit->Move** to **Trash.** This moves the file to the Trash folder. Multiple images can also be moved to the trash in the same way: select them all first.

11.3.3 Viewing the Image Properties

To view the image properties, perform the following steps:

1. Select the image.
2. Choose **File -> Properties**. eog displays a Properties dialog.
3. To press next or previous button to move next image and view its properties.

11.3.4 Printing Images

Before printing you need to set the page settings you would like to use. To do that choose

File->Page Setup.

To print an image, perform the following steps:

1. Select **File->Print**
2.In the **Print** dialog, select the printer you want to use from the list.
3.Click **Print**. *Image Viewer* starts printing now.

11.3.5 Slide Show

You can start a slide show of the images in the current folder by pressing *F12* or selecting the **View -> Slide Show** menu item.

To stop the slide show press *S* or *Esc*.

Switching on/off the full screen mode does not stop the slide show. If the Switch to full screen option is on then the slide show is started in fullscreen mode and exiting from the fullscreen mode will stop the slide show.

The slide show is interrupted when you change folder or re-load the current one.

With the slide show tool and the fullscreen mode you can do presentations. There are two types of presentations: automatic presentations and manual presentations.

Automatic Presentation

To do an automatic presentation, perform the following steps:

1. Go to the folder or catalog containing the images you want to present.
2. Select the images you want to view in the slide show, or select none to view all the images in the current folder or catalog.
3. Press *F12* or choose **View -> Slide Show**. eog starts an automatic presentation of the images. To stop the presentation press *S* or *Q* or *Esc*.

Manual Presentation

To do a manual presentation, perform the following steps:

1. Go to the folder or catalog containing the images you want to present.
2. Select the image from which you want to start the presentation.
3. Press *F*. **eog** displays the image in fullscreen mode.
4. Press *Space* or *N*. eog displays the next image.
5. Press *BackSpace* or *B*. eog displays the previous image.

To stop the presentation press *Q* or *Esc*.

12. Organize your Calendar, Timetable and Booklets

qOrganizer is a general organizer that includes a calendar with schedule,reminders,journal/notes for every day, to-do list. It provides features useful for students such as:timetable and a booklet for marks and absences.

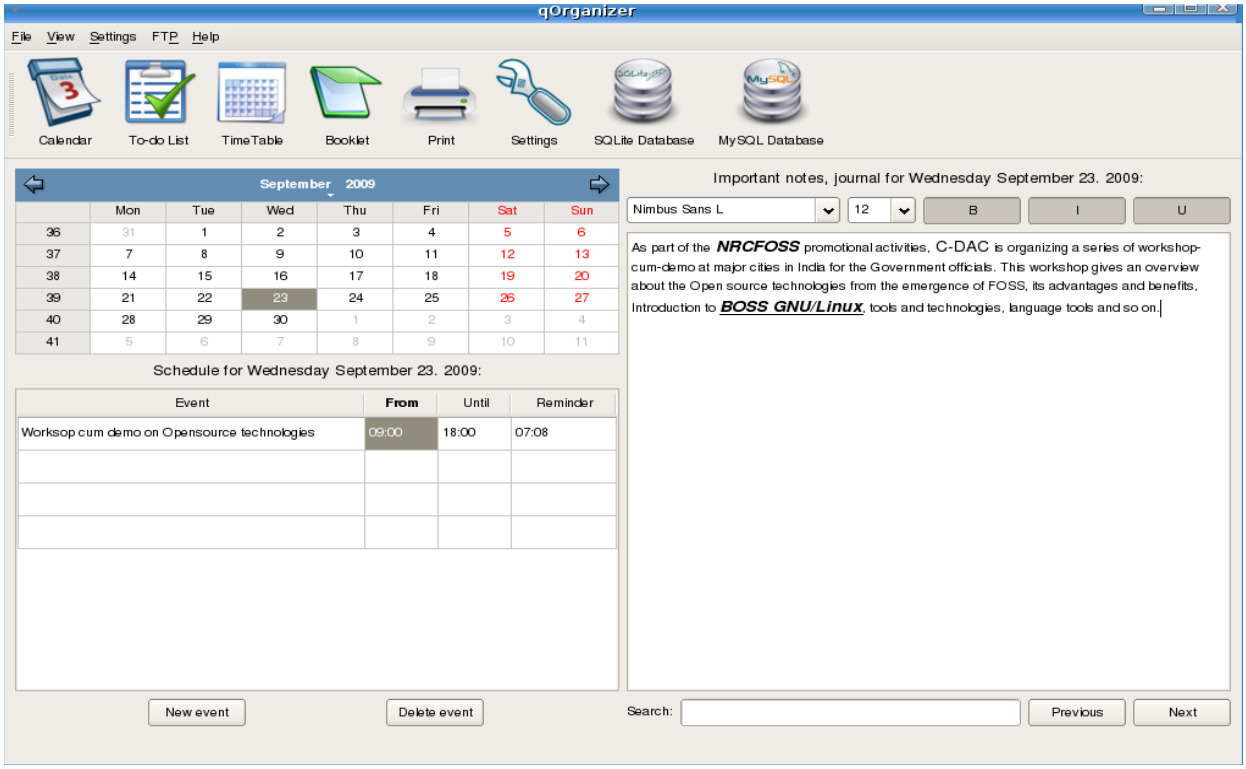
To start Organiser **apt-get install qorganizer** package

after that in terminal type **qorganizer**

The Organizer application pops up along with a taskbar applet, so that the application keeps running in the background always.

12.1 The Calendar

The calendar part of qOrganizer has a calendar which selects the day, a schedule table,a journal textfield and a search field. You can set a time in the schedule in which you will be reminded on that day about the event. The journal supports images, you just open iceweasel or any other file browser, and just drag and drop the image file onto the journal.It will be loaded and displayed.


qOrganizer
File View Settings FTP Help
Calendar
To-do List
TimeTable
Booklet
Print
Settings
SQLite Database
MySQL Database
September 2009
Mon Tue Wed Thu Fri Sat Sun
36 31 1 2 3 4 5 6
37 7 8 9 10 11 12 13
38 14 15 16 17 18 19 20
39 21 22 23 24 25 26 27
40 28 29 30 1 2 3 4
41 5 6 7 8 9 10 11
Schedule for Wednesday September 23. 2009:
Event From Until Reminder
Worksop cum demo on Opensource technologies 09:00 18:00 07:08
New event
Delete event
Important notes, journal for Wednesday September 23. 2009:
Nimbus Sans L
12
B
I
U
As part of the NRCFOSS promotional activities, C-DAC is organizing a series of workshop-cum-demo at major cities in India for the Government officials. This workshop gives an overview about the Open source technologies from the emergence of FOSS, its advantages and benefits, Introduction to BOSS GNU/Linux, tools and technologies, language tools and so on.
Search:
Previous
Next

You can search for words or phrases by typing them into the search field. It will search all your schedules and journals for an entry. You can navigate through them using the Next and Previous buttons.
When you type a clear button will appear inside the search field, if you click it the field will be cleared and the date in the calendar will be set back to the current date.
You can select text in the journal and if you change the current font the font of the text will be changed.

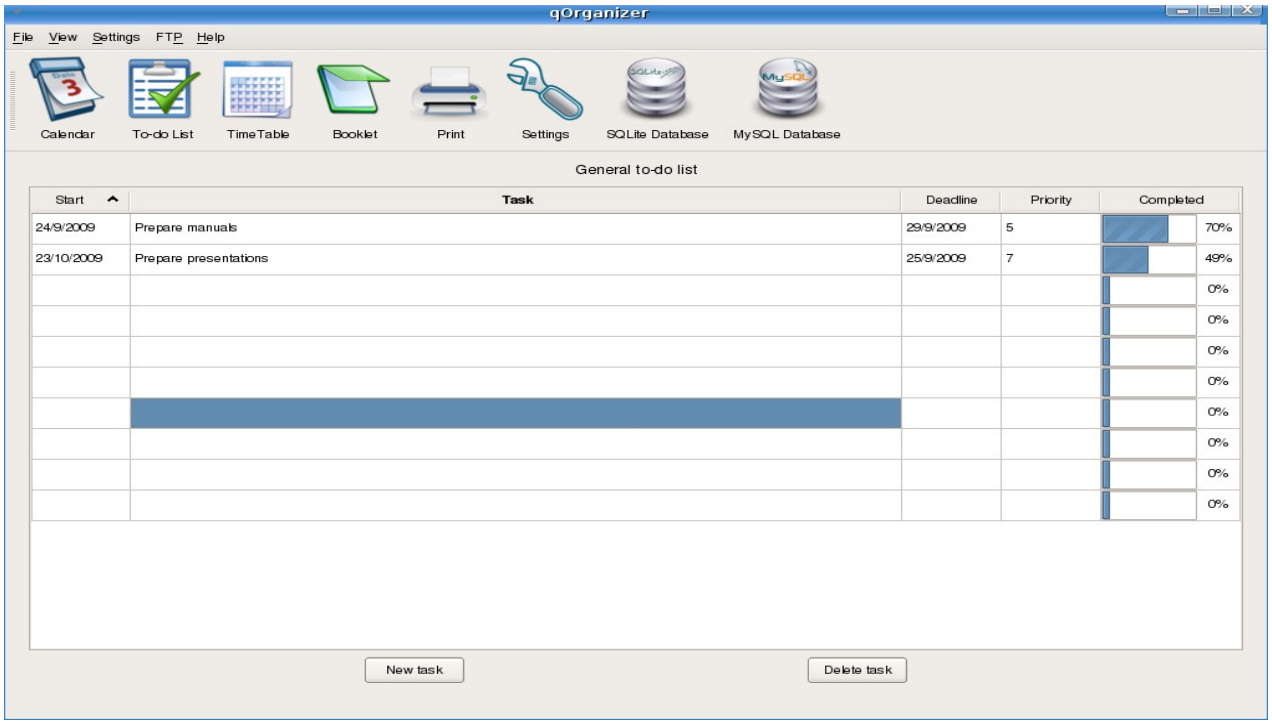
12.2 The To-do list

The to-do list is easy to figure out, you create new tasks and complete the fields in the table.

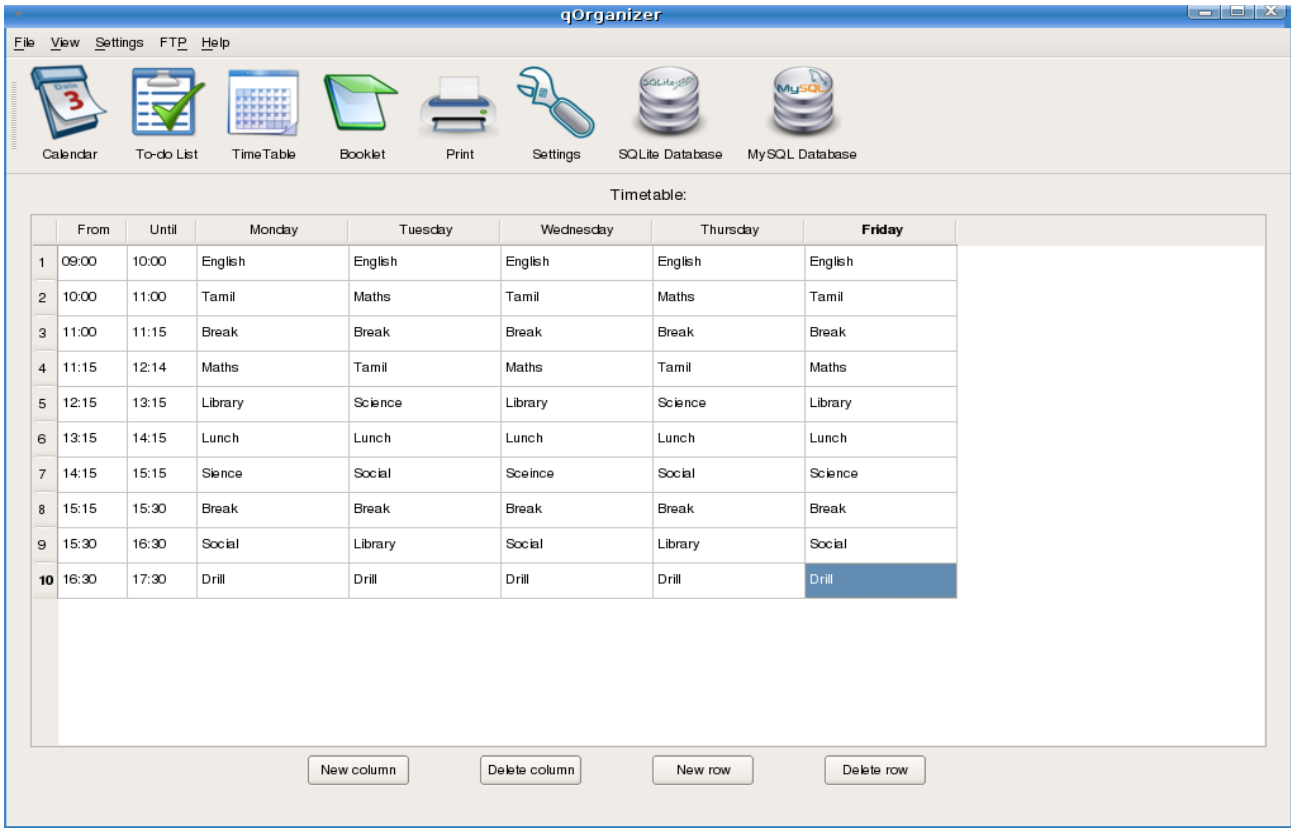
-The Start field: the date when the task was started or assigned.
-The Task field: contains the name and description of the task.

-The Deadline field: contains the date when the task needs to be finished.
-The Priority field: is a number assigned to the task in function of it's importance, the higher the number, higher the importance. It can be used to sort through tasks.

-The Completed field: expresses the amount in which the task is finished in percentage.You can set a number by double clicking the progress bar, when the data is submitted the amount will be displayed on the progress bar.



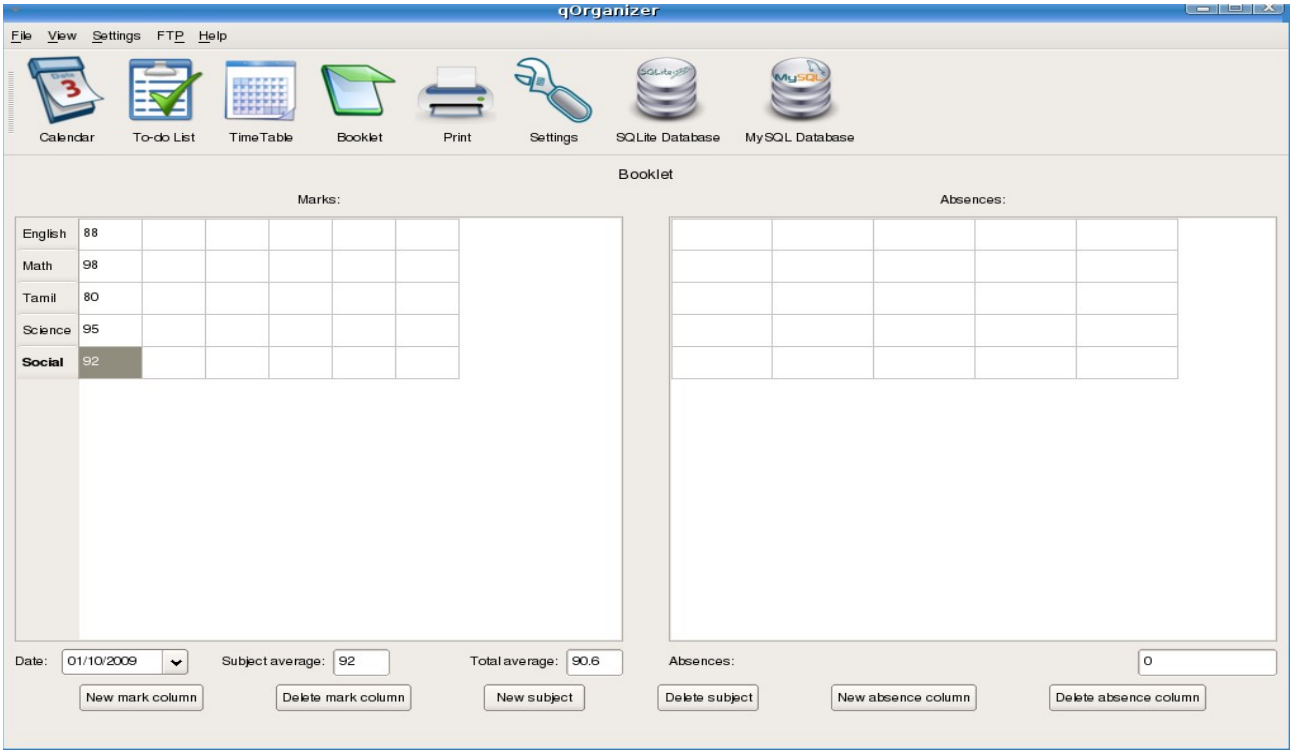
12.3 The Timetable


qOrganizer
File View Settings FTP Help
Calendar
To-do List
TimeTable
Booklet
Print
Settings
SQLite Database
MySQL Database
Timetable:
From Until Monday Tuesday Wednesday Thursday Friday
1 09:00 10:00 English English English English English
2 10:00 11:00 Tamil Maths Tamil Maths Tamil
3 11:00 11:15 Break Break Break Break Break
4 11:15 12:14 Maths Tamil Maths Tamil Maths
5 12:15 13:15 Library Science Library Science Library
6 13:15 14:15 Lunch Lunch Lunch Lunch Lunch
7 14:15 15:15 Sience Social Sceince Social Science
8 15:15 15:30 Break Break Break Break Break
9 15:30 16:30 Social Library Social Library Social
10 16:30 17:30 Drill Drill Drill Drill Drill
New column
Delete column
New row
Delete row

New days can be added or deleted(rows too). You have the possibility to have different content depending on the oddness of the week index. (Week nr. 36 is even, 37 is odd, but this can be reversed in the settings).
If different timetables for odd and even weeks is enabled then it will automatically switch to the timetable for the current week(it detects if it's odd or even and loads the corresponding content).

12.4 The Booklet

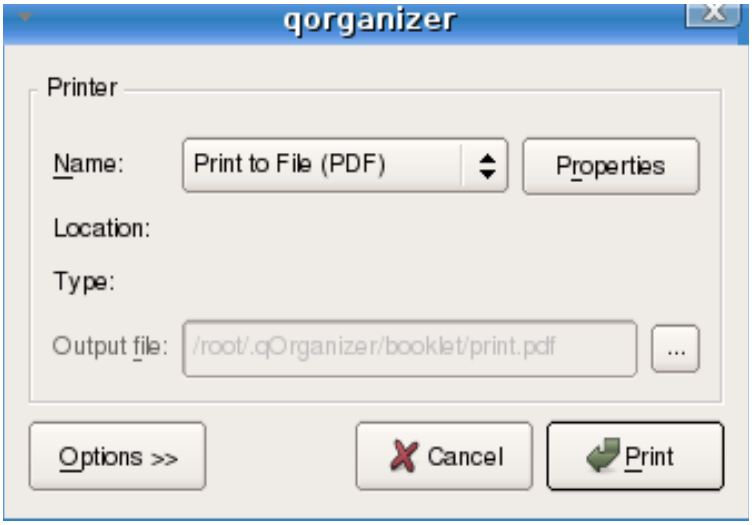
Displays student marks and absences in two tables. New subjects can be added or deleted, the two tables always have the same number of rows.



The absence table contains dates when the student was absent from a class of a subject.
The mark table contains the marks of every subject. Averages are calculated on the fly.
The average of the currently selected subject is displayed in the Subject average field. The total average is calculated by calculating the averages of every subject, adding them and dividing the result with the number of subjects. An option can be enabled in the Settings dialog to round every subject average and add them that way. As an example: if you have the average of 3,5 at Math, if Round subject averages when calculating total average is enabled then it will be rounded to 4 when calculating the total average.
Dates can be assigned to every mark, if no date is assigned the current date is shown.

12.5 Printing

By pressing the Print button or selecting it from the menu the currently active component of qOrganizer will be printed.



12.6 The Settings dialog

The General tab:

Path to data folder:

contains the directory in which the folder .qOrganizer (which contains data and settings) will be saved. If this option is changed qOrganizer loads or creates the appropiate settings and data from the folder which is set.

Autosave:

if this feature is enabled qOrganizer will save the content of every object when it looses focus (another object is clicked, the application is minimized, reduced to systray etc).If you disable it a new icon will be displayed on the toolbar so you can save manually.

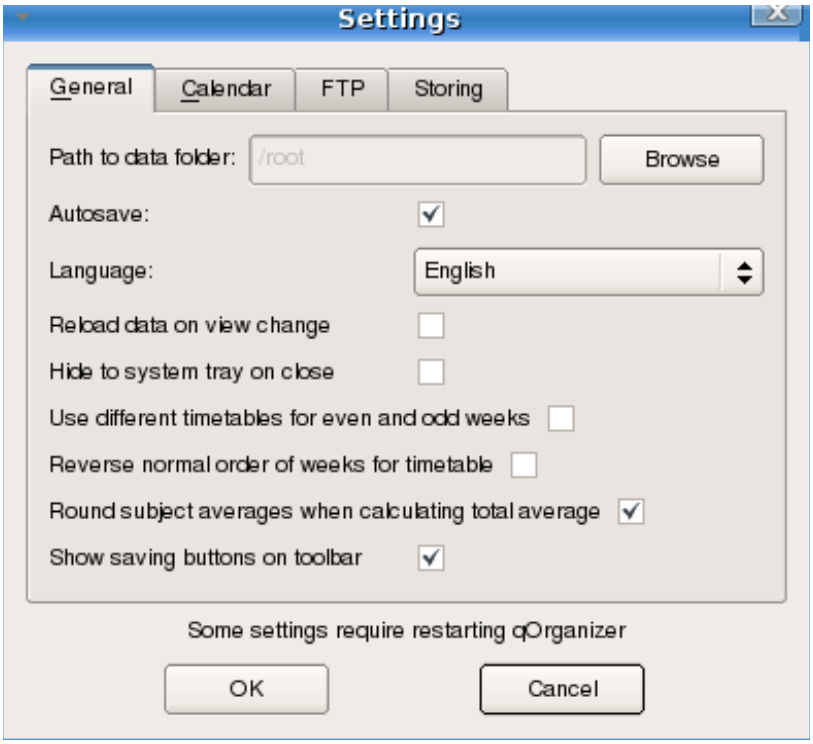
Language:

this is where you can select the language in which the text of the program is displayed.

Note that the language will only be changed if you exit and restart qOrganizer.

Reload data on view change:

qOrganizer will re-read the data files when cycling through the components of the program or restoring it from systray(or the taskbar).This is usefull if you share the same data files on a network, in this case it's advised to turn Autosave off.



Hide to system tray on close:

if this option is enabled the program will be reduced to the system tray if the window is closed otherwise the program will exit on window close.

Use different timetable for even and odd weeks:

if this is enabled the combo box to switch between even and odd weeks will appear in the timetable, therefore you can have two timetables one for even weeks and one for odd weeks.

Reverse normal order of weeks for timetable:

if this option is enabled qOrganizer will treat even weeks (example: week number 36) as odd and odd weeks as even.

Round subject averages when calculating total average:

if this option is enabled then the subject averages will be rounded when calculating the total average(3,5 will be rounded to 4) in the mark table of the booklet.

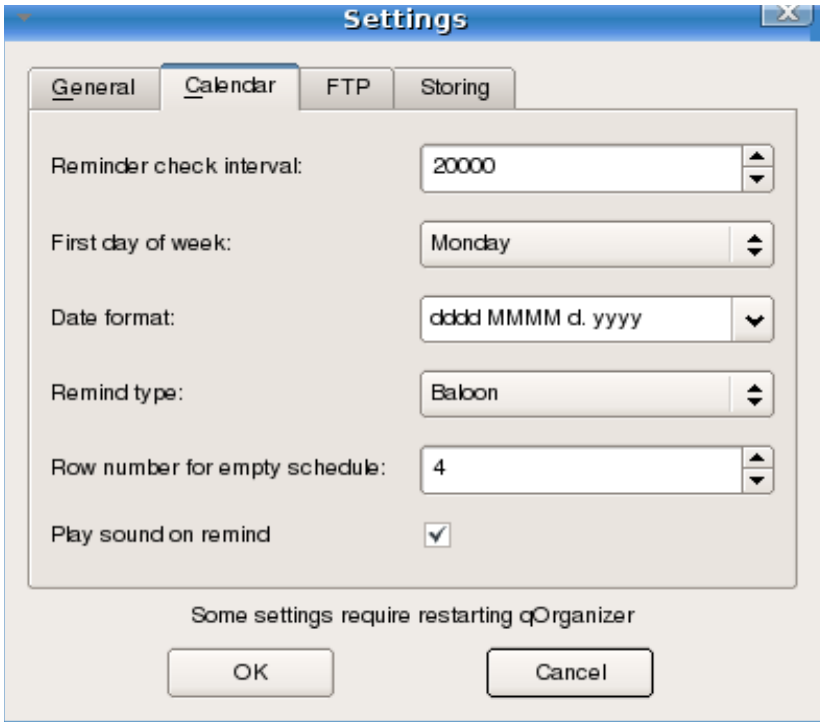
Show saving buttons on toolbar:

if this option is enabled the saving buttons for the other two storing modes (besides the currently used one) will be displayed on the toolbar so you can save data into those.

The Calendar tab:

Reminder check interval:

this is the interval expressed in milliseconds of which the program will check if a time for a reminder has already passed.The bigger the value the lower the CPU usage but reminders could be triggered late.The default and advised value is 20000 (20 seconds).



First day of the week:

this sets the first day of the week in the calendar

Date format:

the format in which the date is displayed. dddd is the name of the day (ex: Monday) , MMMM is the name of the month(ex:October) d. is the day part of the date (ex: 27 th), and yyyy is the year.

Remind type:

this sets the reminder type to eighter a dialog box or a system baloon at the system tray.

Row number for empty schedule:

contains the number of rows automatically added to days with empty schedules.If you want to set the schedule for October 27. then you will get this number of empty rows automatically if the schedule was empty. You can delete them later the number will be remembered (for that day).The default is 4.

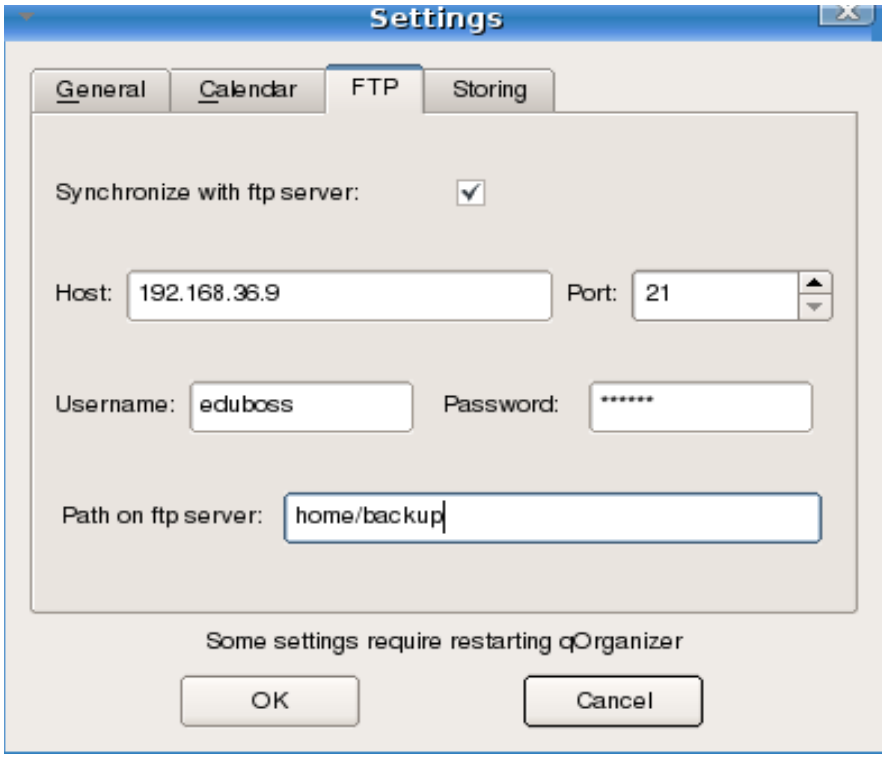
Play sound on remind:

if this is enabled qOrganizer will play a sound when a reminder is triggered along with the reminder dialog box or baloon with the name of the event.

The FTP tab:

Synchronize with ftp server :

enables FTP synchronization and makes the Upload and Download icons appear on the toolbar.



Host:

the domain or ip address of the FTP server.

Port:

the port on which the remote FTP server is running.(21 by default)

Username:
the username to connect with.
Password:
the password which we need to use
Path on ftp server:
the relative path to the folder where the program can upload it's .qOrganizer folder.

Note: Please don't use any important FTP server because the password is stored in plain text on the local machine, if you are not sure about the safety of your computer then please choose an unimportant FTP account.

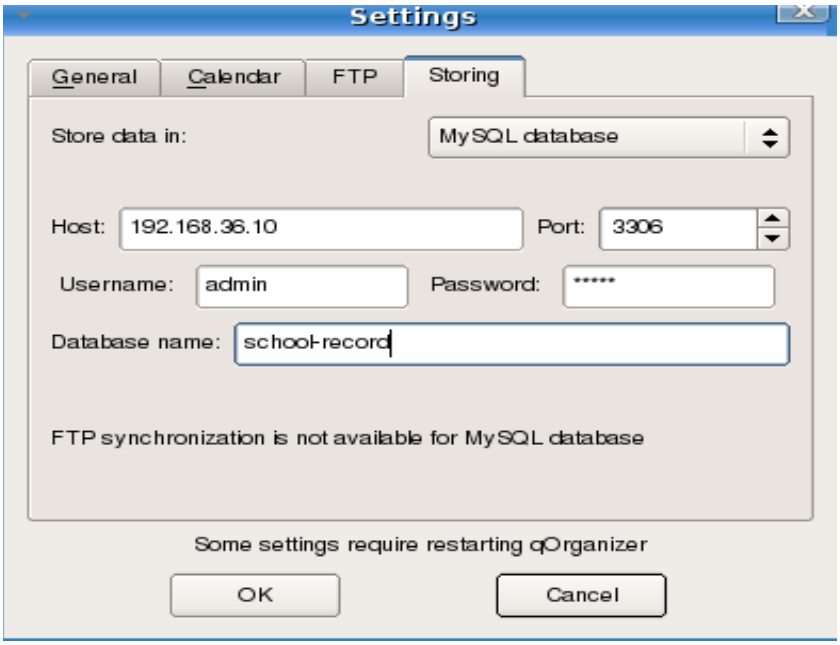
The Storing tab:

Store data in:
*Text files:

store all data in multiple text file within the .qOrganizer folder.This is the fastest mode to store data, and the most tested one, simplistic though.
*SQLite Database:

store all data in a single SQLite database file named qorganizer.db in .qOrganizer.This can be slow on windows with Autosave enabled.
*MySQL database:

store data using a remote MySQL server.



Host:

the domain or ip address of the MySQL server.

Port:

the port on which the remote MySQL server is running.3306 by default.

Username:

the username which to connect with.It is best to create a new user for qOrganizer and give priviledges only over the qOrganizer database.It is not advised at all to use root, since again the password is stored in plain text on the local machine.

Password:

the password which it will use when connecting.

Database name:

the name of the database it will create.

If you change the storing mode, the data stored in the new one will be automatically loaded when you press the ok button.

12.7 Saving between storing modes

You have the possibility to save between different storing modes so you can use (example) an SQLite database file but always save to text files too as a backup, or to update the database on the MySQL server.

If you have all data stored in text files, and want to save it all to MySQL or SQLite databases you need to click through all the days in your callendar and manually save them by pushing the buttons on the toolbar or using the keyboard combinations:

Ctrl + M for saving to MySQL database, Ctrl + T for saving to text files or Ctrl + D for saving to SQLite database.

13. Special Purpose Tools

13.1 Migration Tool

BOSS Bulk Document Converter

This converter allows you to convert one format of documents into the other format of documents like doc to pdf, doc to html etc.,

Usage:

- Place all the documents that need to be converted into one source folder and create an empty folder as destination folder.
- Choose **Applications -> Office->BOSS Bulk Document Converter** or type **converter** in terminal and press *Enter.*
- Select the source and destination folders and the respective formats to be converted.
- You will find your converted documents in the destination folder.

Source and Destination selection

Once we select the Bulk Document Converter, this window will open, where we browse the source and destination folder or copy and paste the pathname of the folders. Then click “Next” to proceed.

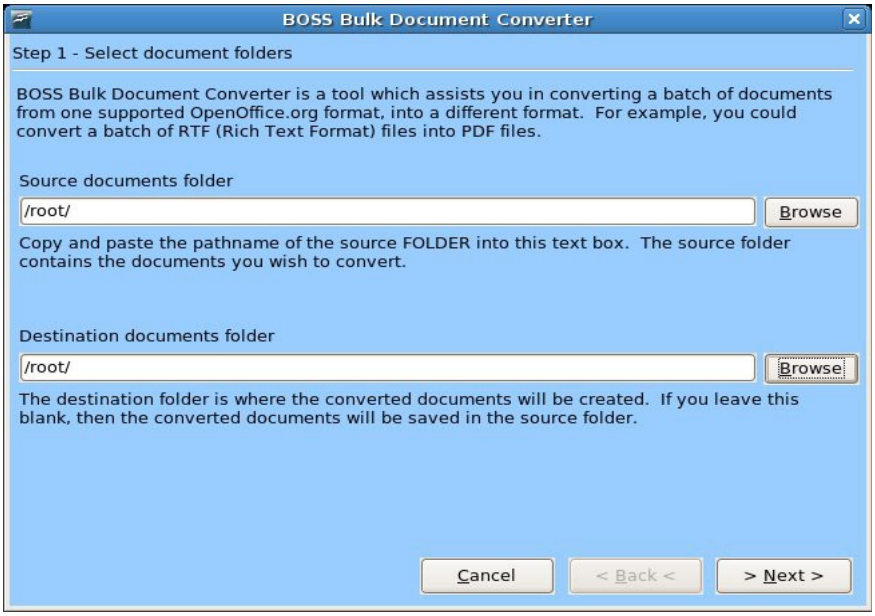

BOSS Bulk Document Converter
Step 1 - Select document folders
BOSS Bulk Document Converter is a tool which assists you in converting a batch of documents from one supported OpenOffice.org format, into a different format. For example, you could convert a batch of RTF (Rich Text Format) files into PDF files.
Source documents folder
/root/
Browse
Copy and paste the pathname of the source FOLDER into this text box. The source folder contains the documents you wish to convert.
Destination documents folder
/root/
Browse
The destination folder is where the converted documents will be created. If you leave this blank, then the converted documents will be saved in the source folder.
Cancel
< Back <
> Next >

Figure 1. Source and Destination selection screen

Overall Document type

After the source and destination selection, there comes a first level of categorization of documents. According to the format of the source file, we have to select the document type.

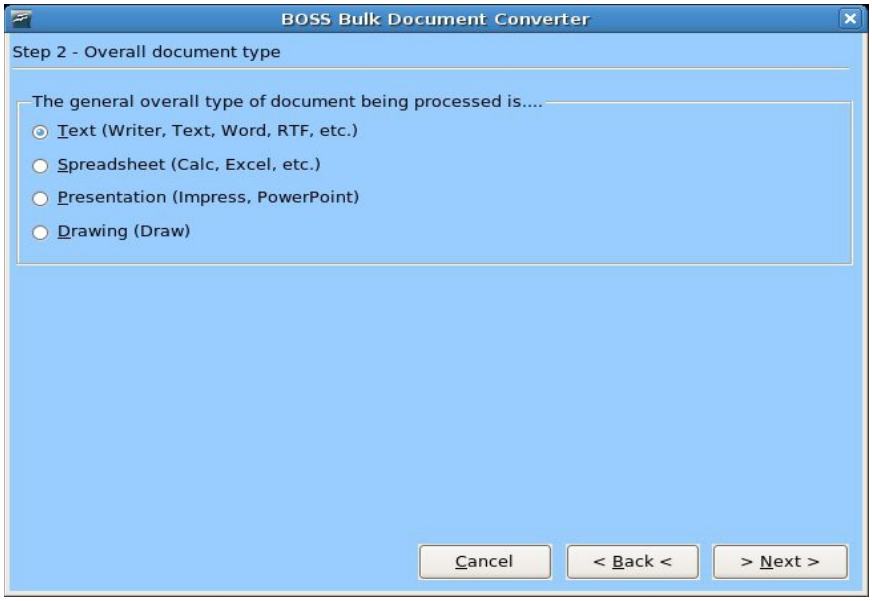

BOSS Bulk Document Converter
Step 2 - Overall document type
The general overall type of document being processed is....
Text (Writer, Text, Word, RTF, etc.)
Spreadsheet (Calc, Excel, etc.)
Presentation (Impress, PowerPoint)
Drawing (Draw)
Cancel
< Back <
> Next >

Figure 2. Overall Document type

Exact source format

Next, the sub-categories of the general overall document type, that we selected appears. Select the exact format of the source. Click “Next” and then proceed.

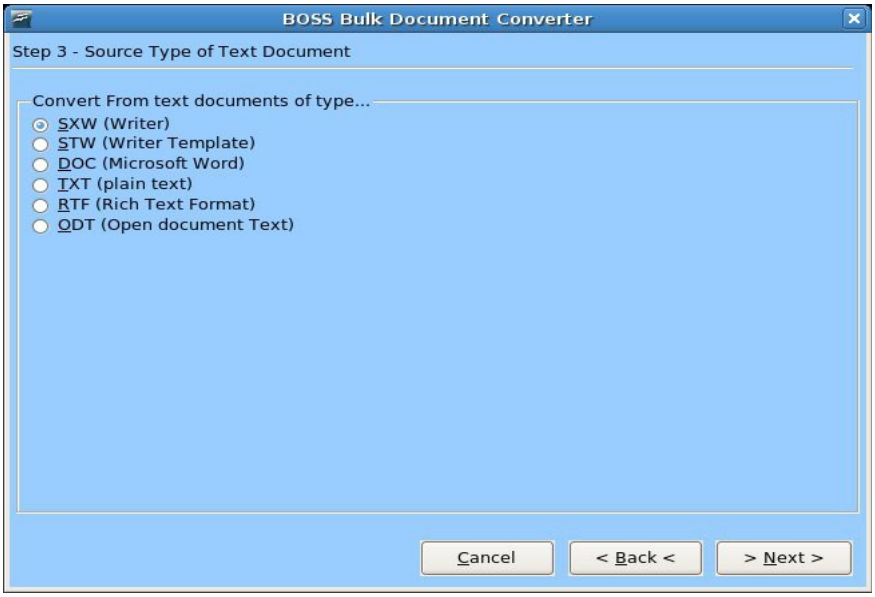


Figure 3. Source Document type

Destination type

The possible destination type format for the selected source format appears now. Select the appropriate format from the list. Once selected, click “Next” to proceed.

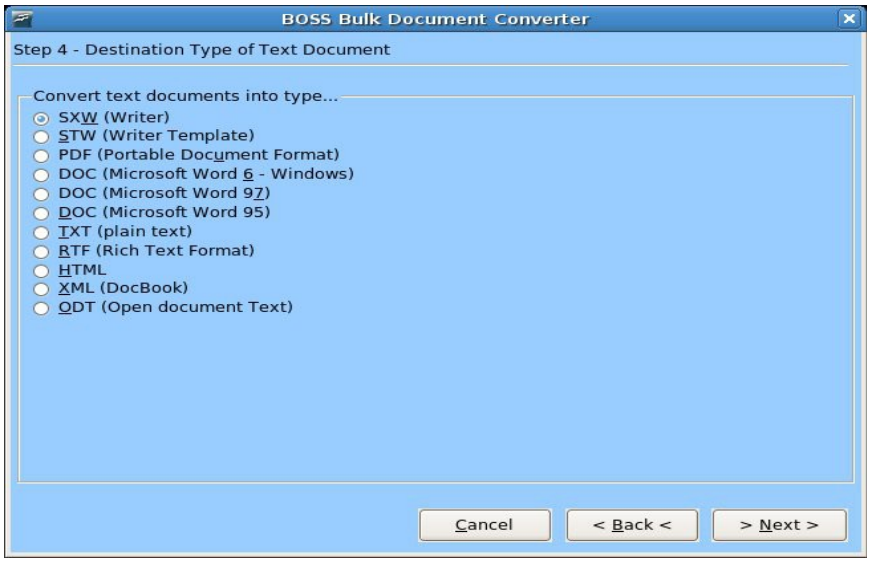


Figure 4. Destination Document type

Conversion

Finally, the warning page for the conversion appears, if you click “Next”, the conversion gets completed.

The screen shots are as follows:

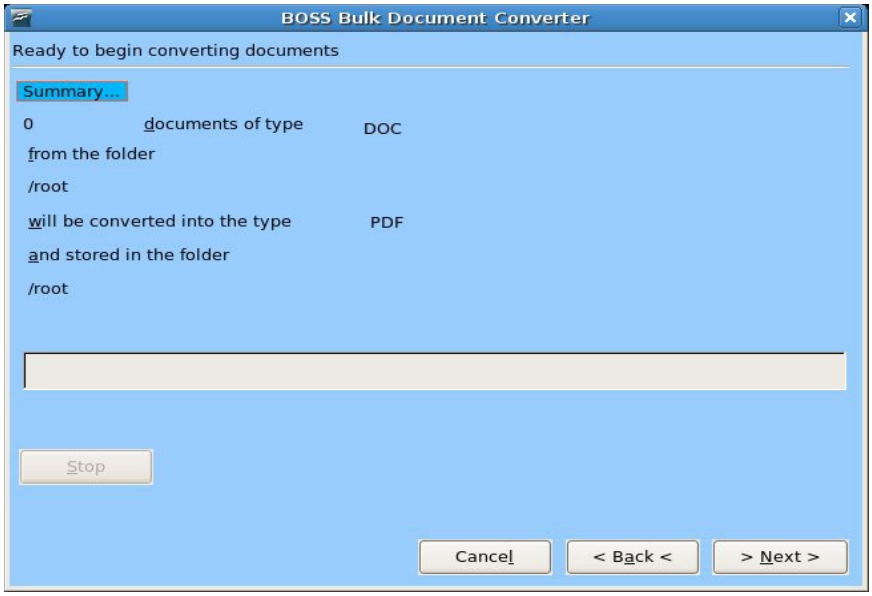


Figure 5. Warning screen

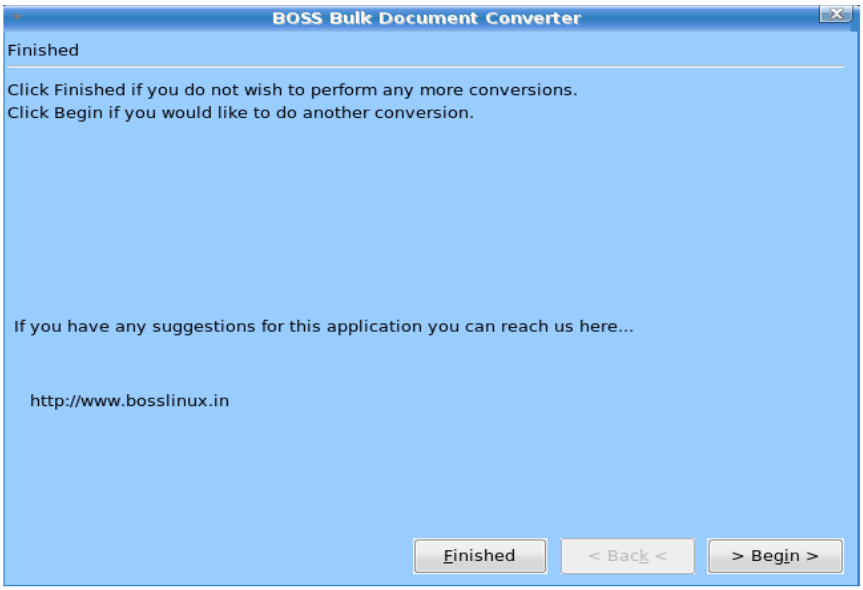
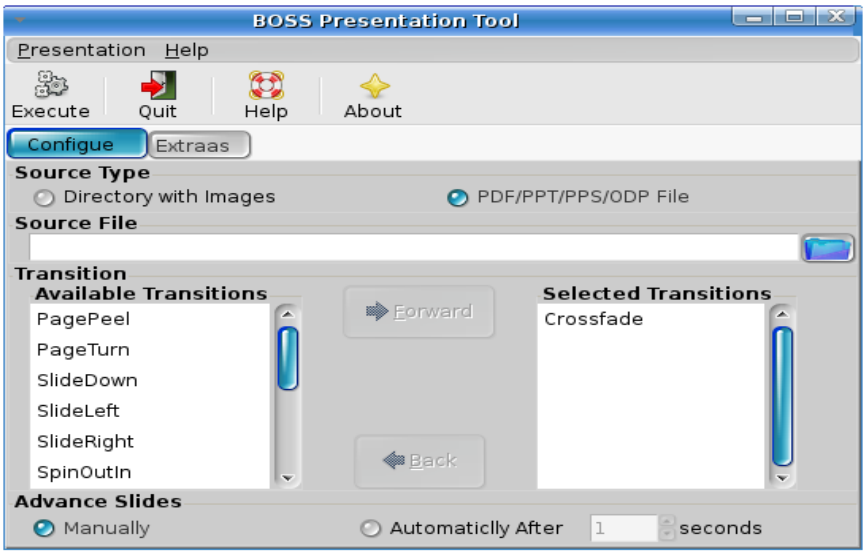

BOSS Bulk Document Converter
Finished
Click Finished if you do not wish to perform any more conversions.
Click Begin if you would like to do another conversion.
If you have any suggestions for this application you can reach us here...
http://www.bosslinux.in
Finished
< Back <
> Begin >

Figure 6. Conversion Completed

13.2 BOSS Presentation Tool

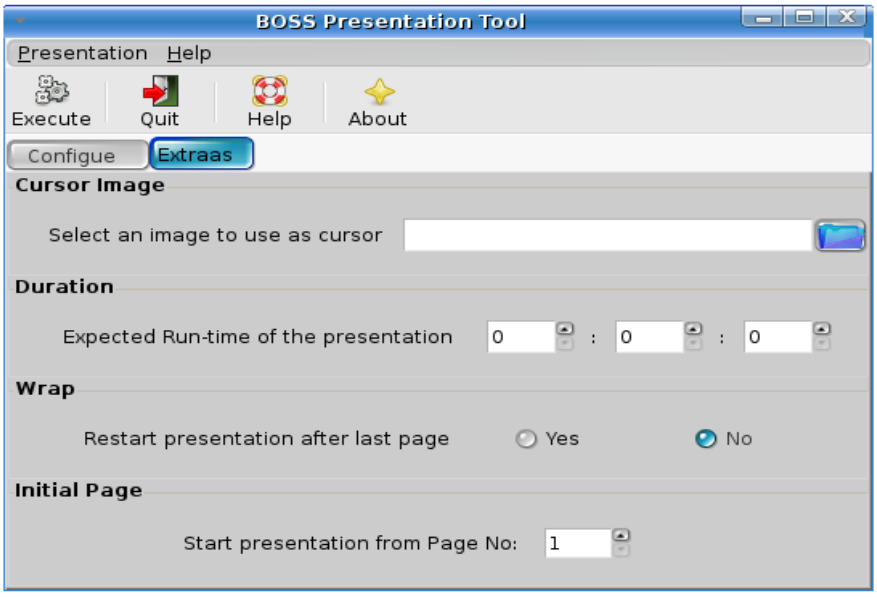
BOSS Presentation tool is the KeyJnote application. KeyJnote is a simple presentation program that displays slide shows of image files (JPEG, PNG, TIFF and BMP) or PDF documents.

To open BOSS Presentation Tool choose, **Applications->Office->BOSS-Presentation-Tool** or type **boss-presentation-tool** in terminal and press *Enter*.



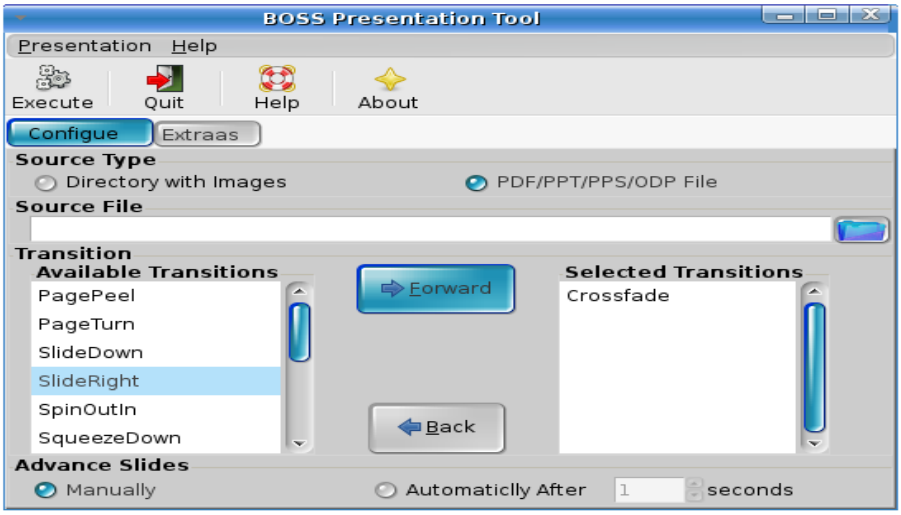
To display images using the presentation tool click “Directory with Images” option. Click the “Browse” button and select a directory(folder) containing one or more images.

To display a PDF or PPT or PPS or ODP file using the presentation tool click “PDF/PPT/PPS/ODP File” option. Click the “Browse” button and select the file with extension .pdf or .ppt or .pps or .odp

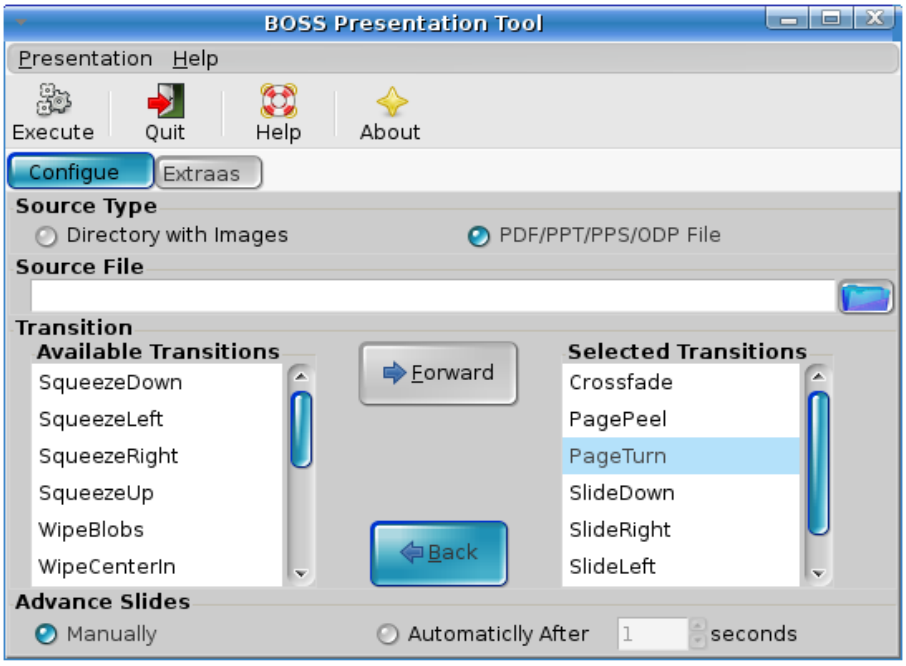


Transitions

Any number of transitions can be applied. The "Available Transitions" box contain a list of all the available transitions. To apply a transition click the transition and click the "Forward" button. The selected transitions will be moved to the "Selected Transitions" box.

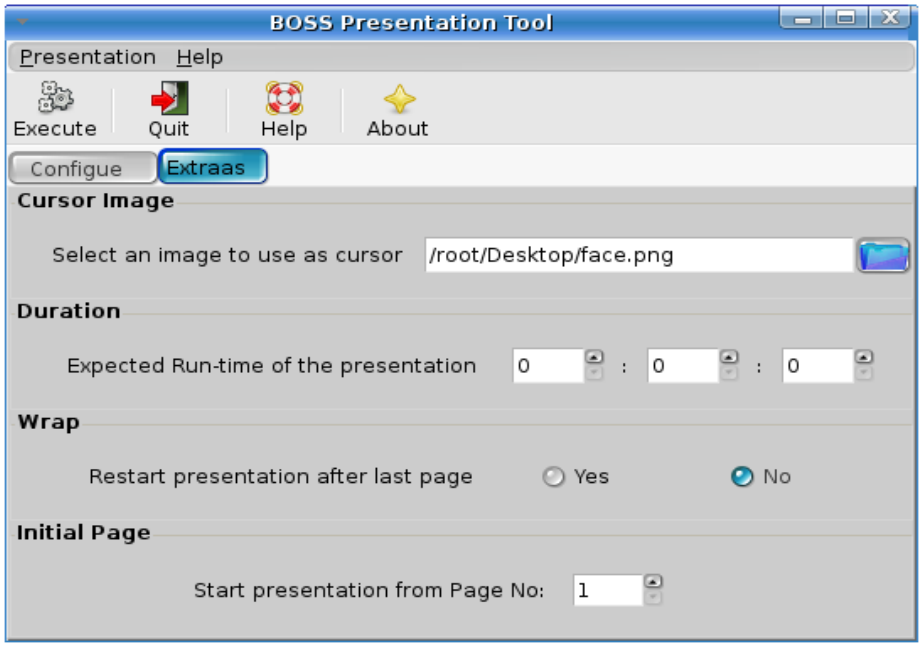


To remove any of the selected transition click the corresponding transition and click "Back" button.



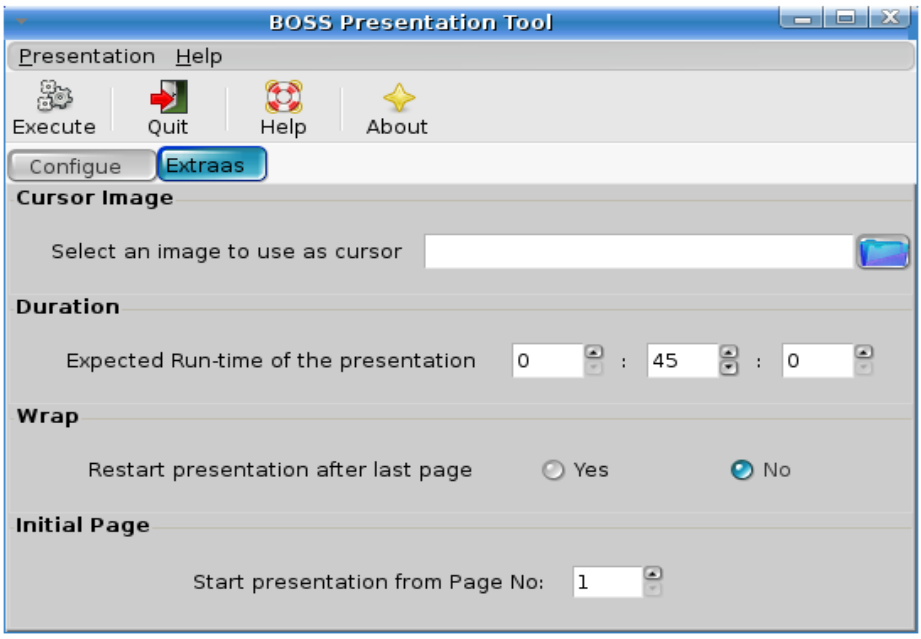
Cursor Image

Instead of using the normal mouse pointer, an image can be used as Cursor.

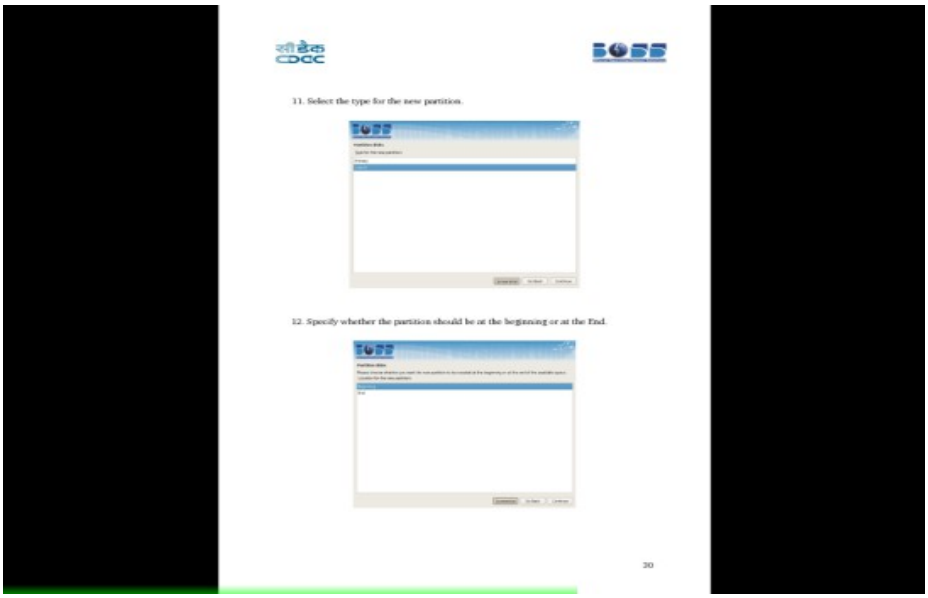


Run Time of the presentation

While giving presentation some time limits will be there. The presenter will not be aware of how much time is left out while giving the presentation. For this the user can specify the time limit.



A progress bar will appear at the bottom of the slide showing the remaining time. If some time is left out the bar will be in "green" color. If the time is over the color of the bar will change to "red".

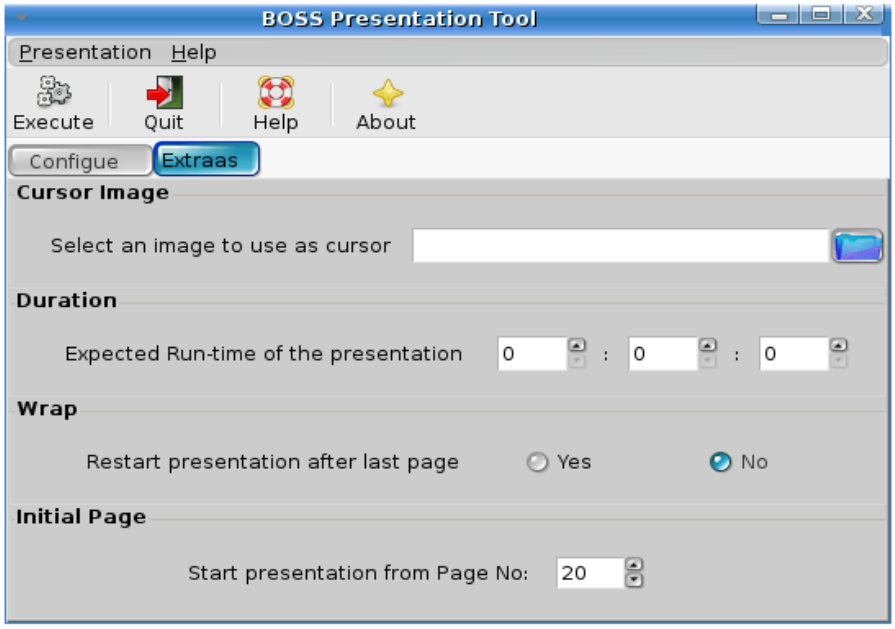


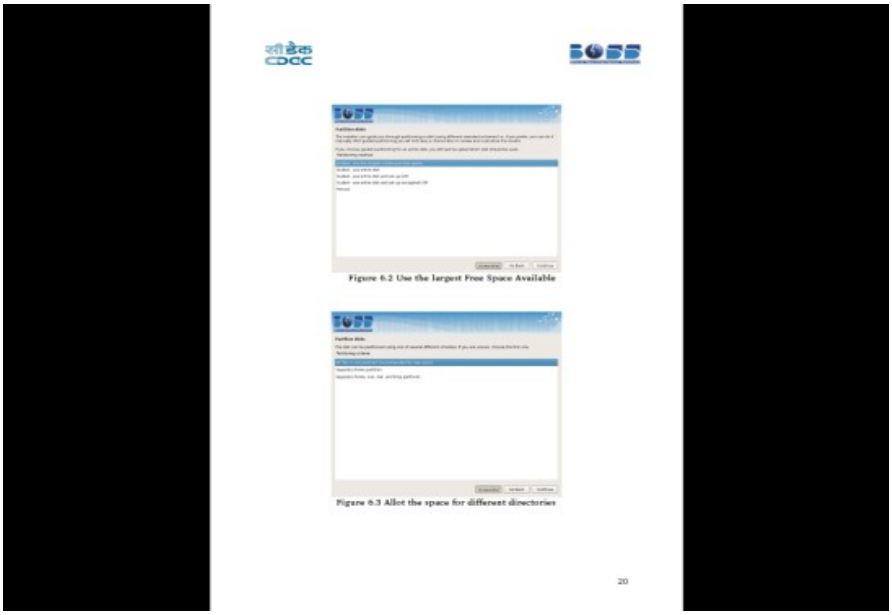
Wrap

After the last page of the presentation if the first page should appear again set the wrap option as "Yes".

Initial Page

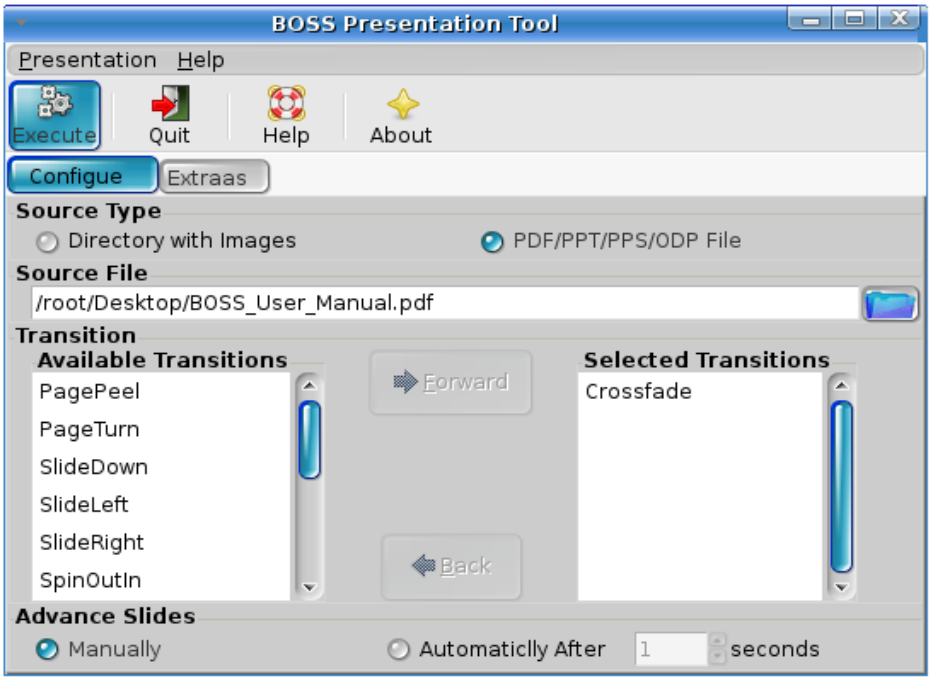
By default the presentation will start from the first page. To start the presentation from a page other than the first page use the "Initial Page" option.





Executing the presentation

To execute, choose **Presentation -> Execute** from the menu or Press "Execute" icon from toolbar. Keyboard Shortcut – *F8*.



Keyboard and Mouse Operations

Q key or Esc key

Quit BOSS Presentation Tool immediately.

LMB (Left Mouse Button), Page Down key, Cursor Down key, Cursor Right key or Spacebar

Go to the next page.

RMB (Right Mouse Button), Page Up key, Cursor Up key, Cursor Left key or Backspace key

Go to the previous page.

Home Key / End Key

Go directly to the first or last page of the presentation.

F key

Toggle fullscreen mode.

Tab key or MMB (Middle Mouse Button)

Zoom back to the overview page. While in overview mode, a page can be selected with the

mouse and activated with the left mouse button. The right or middle mouse button or the Tab key leave overview mode without changing the current page.

LMB over a PDF hyperlink

Jump to the page referenced by the hyperlink. Only hyperlinks that point into the same document are supported; inter-document links or web links will be ignored. This feature is only available if pdftk is installed. Furthermore, it will not work properly when pages are rotated.

Click & Drag with LMB (Left Mouse Button)

Create a new highlight box. While at least one highlight box is defined on the current page, the page itself will be shown in a darker and blurry rendition. Only the highlight boxes will be displayed in their original lightness and sharpness. If a page with highlight boxes is left, the boxes will be saved and restored the next time this page is shown again.

RMB (Right Mouse Button) over a highlight box

If the right mouse button is clicked while the mouse cursor is above a highlight box, the box will be removed. If the last box on a page is removed, the page will turn bright and sharp again.

S key

Save the info script associated with the current presentation. The main purpose for this is to permanently save highlight boxes so they will be restored the next time this presentation is started.

T key

Activate or deactivate the time display at the upper-right corner of the screen. If the timer is activated while the very first page of the presentation is shown, it activates »time tracking« mode. In this mode, a report of all pages visited with their display duration, enter and leave times will be written to standard output. This will be very useful when preparing presentations.

R key

Reset the presentation timer.

Return key or Enter key

Toggle spotlight mode. In this mode, the page is darkened in the same way as if highlight boxes are present, but instead of the boxes, a circular “spotlight” will be shown around the mouse cursor position, following every motion of the mouse cursor.

+ key / – key or mouse wheel

Adjust the spotlight radius.

Z key

Toggle zoom mode. When this key is first pressed, the current page will zoom in. In zoom mode, all other functions will work as normal. Any operations that leave the current page, such as moving to the next or previous page or entering the overview screen, will leave zoom mode, too.

O key

This will toggle the »visible on overview page« flag of the current page. The result will not be visible immediately, but it can be saved to the info script (using the *S* key) and will be in effect the next time the presentation is started.

I key

This will toggle the skip flag of the current page. A page marked as skipped will not be reachable with the normal forward/backward navigation keys.

Click & Drag with RMB (Right Mouse Button) in zoom mode

Moves the visible part of the page in zoom mode.

Cursor keys in overview mode

Navigate through pages.

Any other alphanumeric (*A-z, 0-9*) or function key (*F1-F12*) can be used to assign shortcuts to pages that require quick access. If one of the keys is pressed together with Shift, the currently displayed page is associated with this key. To recall the page later, it is sufficient to press the shortcut key again. Shortcuts can be permanently stored with the S key.

14. Playing Music and Movies

14.1 Banshee Music Player

Banshee is a music management and playback application for GNOME.

Banshee has a beautiful user interface and is well architected.

Features:

- Import CDs
- Manage your library
- Play your music
- Create and maintain playlists
- Sync music with your iPod
- Play music directly from your iPod
- Create audio and mp3 CDs

To start Banshee Music Player, choose **Applications -> Sounds & Video -> Banshee Media Player** or type **banshee** in terminal and press *Enter*.

14.1.1 Importing Music

To import music, click "Music", then "Import Media..." and choose the location on your hard drive to import your music. You can import digital music files including OGG, FLAC, MP3 or WAV. Banshee will then sort your music based on artist, track name, track number or album. Clicking on one of the columns will make Banshee sort in that order.

To import music from an audio CD, insert the CD in your CD-ROM drive. The left hand side of Banshee on the side menu will display a CD icon.

Click on the CD icon on the left bar to display the songs on the CD. Click on "Import CD" in the upper right hand corner and Banshee will import the songs into your collection in the file format you've chosen in your Preferences. To choose the file format (OGG, MP3, FLAC or WAV), click **Edit -> Preferences**. In the “CD Importing” section choose the format from the “Output Format” drop down menu.

14.1.2 Podcasts

Banshee supports subscribing and listening to Podcasts. Choose "Podcasts" on the left hand side menu. To subscribe to a Podcast, click on "Subscribe to Podcast". Enter the URL of the Podcast you would like to subscribe to. Banshee will then begin to download the latest

Podcast, and show all available downloads for the URL in the bottom pane. Click on the check box to download additional Podcasts.

14.1.3 Playing Audio CDs

To play your CD, insert it into your drive. It should automatically appear within Banshee in your sources list, beneath your Music Library and Video Library sources. You can click the new source (named Audio CD, or the name of the album) and double click a track in it to begin playback.

14.1.4 Importing/Ripping Audio CDs

1. Insert a CD
2. Banshee automatically detects it and adds it to the side menu; click it
3. Uncheck any tracks you don't want imported
4. Press the *Import CD* button, located near the upper-right corner of Banshee
5. Banshee will begin importing the CD. As it finishes each track, it will appear in your *Music Library*

Adjusting Your Preferences

You can change your CD importing preferences. Go to the *Edit* menu, and choose the *Preferences* menu item. Within the Preferences dialog, choose the *Audio CD* tab.

Import format

The defaults should be fine, but if you prefer to have your music imported as a certain file type (.mp3, .wma, or something else) or with certain quality settings (128kbps, 256kbps, etc) you can set that here. If you don't see the file format you want, you need to ensure you have the appropriate GStreamer plugin/codec installed.

Automatic import

With this item checked, Banshee will automatically begin importing as soon as you insert an audio CD - unless it can't find the track list (album name, track titles) for it, or it detects you already have at least part of the album imported.

Eject when done importing

If you want Banshee to automatically eject your audio CDs after importing them, check this.

14.2 Movie Player

Totem is the official movie player of the GNOME desktop environment. It is also BOSS's default video player. Totem plays any xine or gstreamer-supported file. It enables you to play movies or songs.

To start Totem, choose **Applications -> Sounds & Video -> Movie Player** or type **totem** in terminal and press *Enter*.

Totem Movie Player provides the following features:

•Support a variety of video and audio files.

•Provide a variety of zoom levels and aspect ratios, and a full screen view.

•Seek and Volume controls.

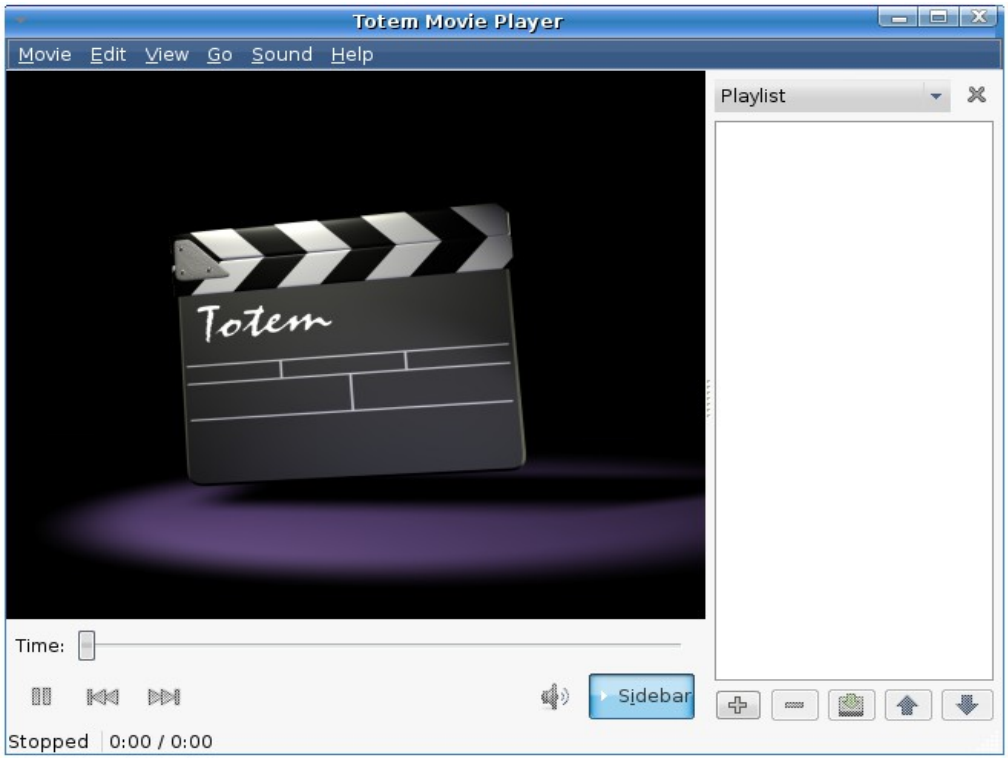
•A playlist.

•A complete keyboard navigation.

Totem Movie Player also comes with additional functionalities such as:

•Video thumbnailer for GNOME.

•Nautilus properties tab.

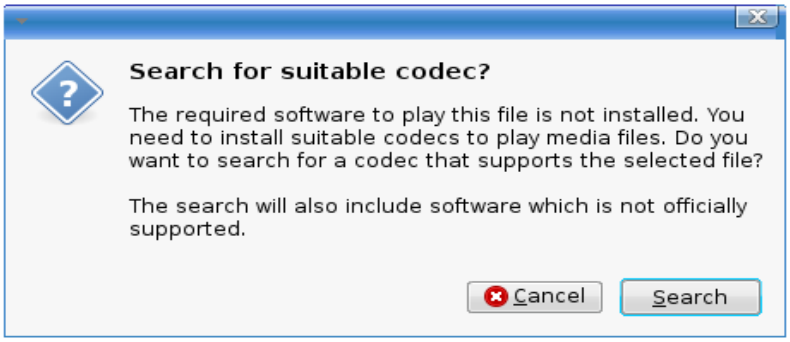


14.2.1 Opening a File

To open a video or an audio file, choose **Movie -> Open** (*Ctrl+O*). “Select Movies or Playlists” dialog is displayed. Select the file you want to open, and click “OK”.

You can drag a file from another application such as a file manager to the Totem Movie Player window. The Totem Movie Player application will open the file and play the movie or song. Totem Movie Player displays the title of the movie or song beneath the display area and in the title bar of the window.

If suitable codecs for the format your are trying to play is not installed the following window appears:


Search for suitable codec?
The required software to play this file is not installed. You need to install suitable codecs to play media files. Do you want to search for a codec that supports the selected file?
The search will also include software which is not officially supported.
Cancel
Search

Once “Search” is clicked a window appears showing the list of available codecs. Select the codecs you want to install and click “Install”.

Install multimedia codecs
Codec
Popularity
GStreamer extra plugins
Codecs to play mp3, sid, mpeg1, mpeg2, AC-3, DVD ...
GStreamer Fluendo MP3 Plugin
Codecs to play MP3 Files
GStreamer ffmpeg video plugin
Codecs to play mpeg, divx, mpeg4, ac3, wmv and as...
GStreamer ffmpeg video plugin
FFmpeg plugin for GStreamer
This GStreamer plugin supports a large number of audio and video compression formats through the use of the FFmpeg library.
Help
Cancel
Install

Once the installation of codecs is completed you can play the song or movie.

14.2.2 Opening a Location

To open a file by URI location, choose **Movie -> Open Location** (*Ctrl+L*). The Open from URI dialog is displayed. Use the drop-down combination box to specify the URI location of file you would like to open, then click on the Open button.

14.2.3 Play a Movie (DVD or CD)

Insert the disc in the optical device of your computer, then choose **Movie -> Play Disc**.

14.2.4 Eject a DVD or CD

To eject a DVD or CD, choose **Movie -> Eject** (*Ctrl+E*).

14.2.5 Pause a Movie or Song

To pause a movie or song that is playing, click on the Pause button at the bottom left of the window, or choose **Movie -> Play/Pause**. When you pause a movie or song, the status bar displays “Paused” and the time elapsed on the current movie or song stops.

To resume playing a movie or song, click on the Play button, or choose **Movie -> Play/Pause**.

14.2.6 View Properties of a Movie or Song

To view properties of a movie or song, choose **View -> Sidebar** to make the sidebar appear, and choose “Properties” in the drop-down list.

The dialog contains the following information:

•General - Title, artist, year and duration of movie or song.

•Video - Video dimensions, codec and frame rate.

•Audio - Audio bit rate and codec.

Changing the Video Size

To change the zoom factor of display area, you can use the following methods:

•To zoom to full screen mode, choose **View -> Fullscreen** or press *F11*

•To exit fullscreen mode, click on the “Leave Fullscreen” button or press *Esc* or *F*.

•To zoom to half size (50%) of the original movie or visualization, choose **View -> Fit Window to Movie -> Resize 1:2** .

•To zoom to size (100%) of the original movie or visualization, choose **View -> Fit Window to Movie -> Resize 1:1**.

•To zoom to double size (200%) of the original movie or visualization, choose **View -> Fit Window to Movie -> Resize 2:1** .

14.2.7 Adjusting the Volume

•To increase the volume, choose **Sound -> Volume Up** (*Up Arrow*) or move the volume slider to the right.

•To decrease the volume, choose **Sound -> Volume Down** (*Down Arrow*) or move the volume slider to the left.

To adjust the sound volume, you can also use the volume button in the panel or keyboard. Press the volume button and choose the volume level with the slider.

14.2.8 Make Window Always On Top

To make the Totem Movie Player window always on top of other application windows, choose **View -> Always on Top**

14.2.9 Repeat Mode

To enable or disable repeat mode, choose **Edit -> Repeat Mode**.

14.2.10 Shuffle Mode

To enable or disable shuffle mode, choose **Edit -> Shuffle Mode**

14.2.11 PlayList

•To show playlist, choose **View -> Sidebar**, or click the Sidebar button, and choose “Playlist” on the top of the sidebar. The Playlist dialog is displayed.

•To hide Playlist, choose **View -> Sidebar** or click on the Sidebar button again.

You can use the Playlist dialog to do the following:

•Adding a track or movie - To add a track or movie to the playlist, click on the “Add...” button. The Select files dialog is displayed. Select the file that you want to add to playlist, then click “OK”.

•Removing a track or movie - To remove track or movie from the playlist, select the filenames from the filename list box, then click on the “Remove” button.

•Saving playlist to file - To save playlist to file, click on the “Save” button. The Save playlist dialog is displayed, specify the filename that you want to save the playlist.

•Moving track or movie up the playlist - To move track or movie up the playlist, select the filenames from the filename list box, then click on the “Up” button.

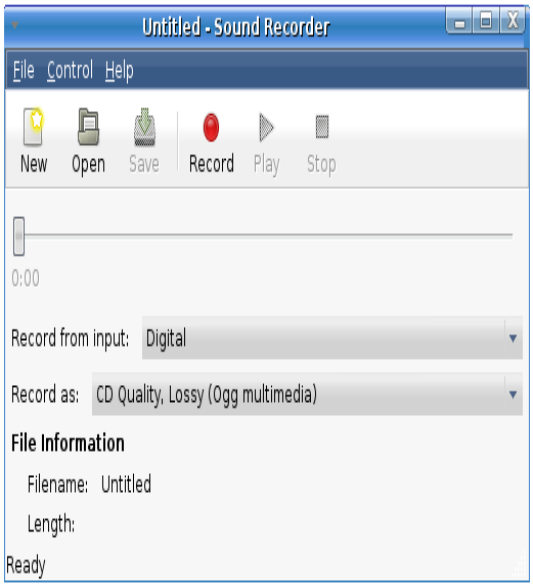
•Moving track or movie down the playlist - To move track or movie down the playlist, select the filenames from the filename list box, then click on the “Down” button.

14.3 Sound Recorder

The Sound Recorder application enables you to record and play .flac, .ogg, and .wav sound files.

To start Sound Recorder choose **Applications -> Sound & Video -> Sound Recorder** or type **gnome-sound-recorder** in terminal and press *Enter*.

When Sound Recorder is started the following window appears



14.3.1 Recording

To start a new recording session, perform the following steps:

1.Choose **File -> New.**

2.Use the “Record as” drop-down list to select one of the following recording options:

•CD Quality, Lossless

•CD Quality, Lossy

•Voice

1.To start recording, choose **Control -> Record**.

2.To stop recording, choose **Control -> Stop**.

3.To play back the recording, choose **Control -> Play**.

4.To save the recording, choose **File -> Save As**, then type a name for the sound file.

14.3.2 Playing a Sound File

To play a sound file, choose **File -> Open**. Select a sound file in the “Open a File” dialog, then click “OK”. Sound Recorder displays the duration of the file in minutes and seconds below the progress bar. To play the file, choose **Control -> Play**. The progress indicator moves along the progress bar as the sound file is playing.

14.4 Restricted Formats

BOSS GNU/Linux strives to make every piece of software available under the licensing terms laid out in the BOSS GNU/Linux License Policy. Patent and copyright restrictions complicate the ability of a free operating system to distribute software that will support proprietary or non-free formats.

BOSS GNU/Linux's commitment to only include completely free software by default means that proprietary media formats are not configured 'out of the box'. This page will show you how to enable support for the most popular non-free media formats.

These are non-Free formats and tools, well-known from the Win32 world. The most important ones are Java, Windows Media, Real Media, Real Player, DVD-video, Macromedia Flash, AAC and iTunes Music Store and some other Video and Audio Codecs. All of them are not included within the BOSS standard installation. You have to install them manually.

How to play restricted formats with BOSS GNU/Linux(media codecs)

You can install the multimedia codecs with the following steps

1) Update your sources.list with BOSS repo, so open the terminal and execute the following command

#vi /etc/apt/sources.list

2) Add the following line in that file

deb http://packages.bosslinux.in/boss BOSS main contrib non-free

3) Save the file and quit, *Esc+:+wq*

4) Open the terminal and execute the following commands

sudo apt-get update

sudo apt-get install gstreamer0.10-plugins-bad

sudo apt-get install libarts1-mpeglib

sudo apt-get install libarts1-xine

14.5 Audio CD Extractor

Sound Juicer is a simple and clean CD ripping tool. It allows you to extract the audio from audio compact discs and convert them into audio files.

To start Sound Recorder choose **Applications -> Sound & Video -> Audio CD Extractor** or type **sound-juicer** in terminal and press *Enter*.

When you start Sound Juicer, it will examine the CD in the drive and try to locate information about the audio tracks

When Sound Recorder is started the following window appears

14.5.1 Entering Track Data

Sound Juicer
Disc Edit Help
Title: The Battle of Los Angeles
Artist: Rage Against the Machine
Genre:
Year: 1999
Disc:
Duration: 45:10
Track Title Artist Duration
1 Testify Rage Against the Machine 3:30
2 Guerrilla Radio Rage Against the Machine 3:26
3 Calm Like a Bomb Rage Against the Machine 4:58
4 Mic Check Rage Against the Machine 3:33
5 Sleep Now in the Fire Rage Against the Machine 3:25
6 Born of a Broken Man Rage Against the Machine 4:41
7 Born as Ghosts Rage Against the Machine 3:22
8 Maria Rage Against the Machine 3:48
Play
Stop
Estimated time left: 8:25 (at 5.2×)

When insert an audio CD, Sound Juicer will automatically retrieve the track data.

The top of the window contains text boxes for the title, artist, year, and genre of the CD. Below that is a list of the audio tracks on the CD. To set the track title and artist for each track simple enter the title and artist.

To edit the title of a track, first select the track, then click on the title. When you have finished entering the title, press the **Enter** key on your keyboard, or click outside the title.

14.5.2 Extracting and Playing

When inserting the Audio CD automatically extract all of the tracks on the CD to audio files.

Also use **Edit ▸Select All** and **Edit ▸ Deselect All** menu items to select all or none of the tracks to be extract.

To stop the Extract process click **stop** button .

After entering all information press C**trl+Enter** to save the files in to **Music** folder.

For playing the sound tracks following options available.

To begin playing the CD, simply click the **Play** button, or press **Ctrl+P**.

To play a particular track, select that track and click **Play**, or simple double-click the track.

To pause the track press **pause** button.

14.6 Cheese Webcam Booth

Cheese uses webcamera connected with the PC to take photos and videos, applies fancy special effects and lets you share the fun with others.

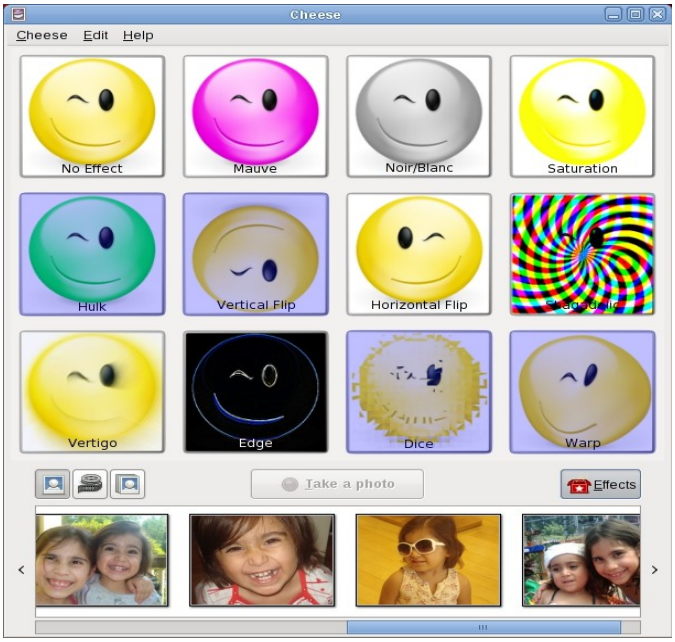
To start Sound Recorder choose **Applications -> Sound & Video -> Cheese Webcam Booth** or type cheese in terminal and press *Enter*.

The main screen of Cheese supports two different layouts at the moment. The default looks like the screenshot below, it has the preview image centered and the thumbnail slideshow below.

14.6.1 Usage

Especially for Cheese-users with small displays, like the ones in netbooks, we have designed another view. It is more horizontally aligned, in order to fit better on small widescreen displays. The wide-view is shown in the screenshot below.

To apply effects to the input of your webcam, click the button labelled Effects. When you then go to the effects window, you will see a window similar to the image below.

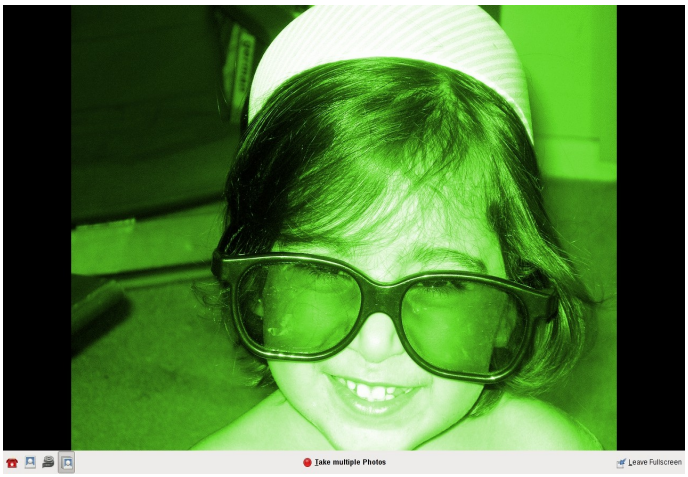


Cheese ▸ **Photo** to change to photo mode. Photo mode will take a single photo every time the button labelled **Take a photo** or the **Spacebar** key is pressed, and will save to disk.

Cheese ▸ **Video** to change to video mode. Video mode will start recording a video every time the button labelled **Start Recording** or the **Spacebar** is pressed. The video will stop recording and save to disk when the button labelled **Stop Recording** or the **Spacebar** is pressed.

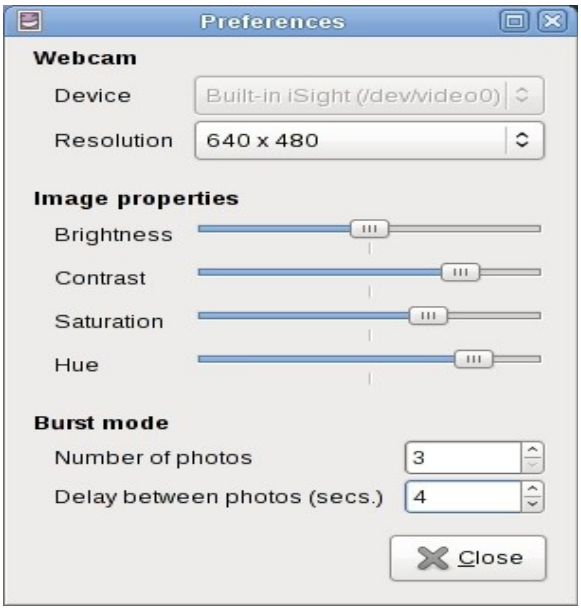
To take more pictures in a row **Cheese** ▸ **Burst** to change to burst mode.

Burst mode will start to take a series of pictures with an interval of some seconds in between photos when the button labelled **Take Multiple Photos** or the **Spacebar** key is pressed.



14.6.2 Setting Preferences

The preferences dialog allows you to set up some webcam specific parameters and parameters specific to the burst mode.



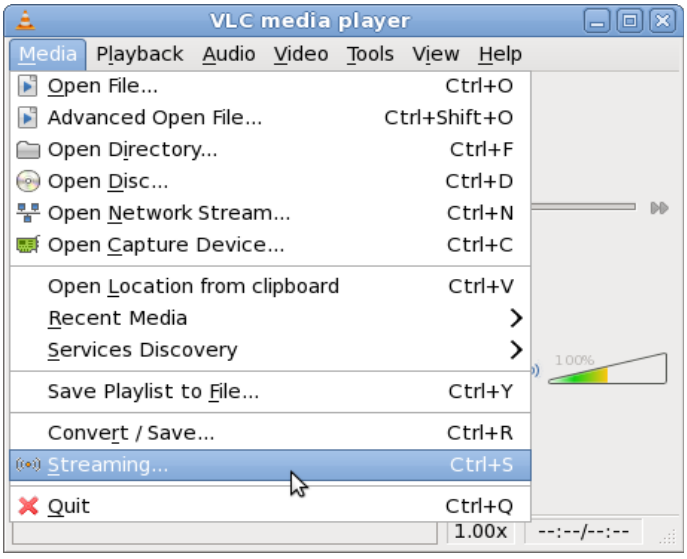
It's possible to define where Cheese stores the captured media (photos and videos). These settings are stored in GConf. You can change the settings with the gconf-editor, application. There you have to select /apps/cheese in the tree on the left. Then you can set the **video_path** and **photo_path** to the location you prefer.

14.7 Video Streaming

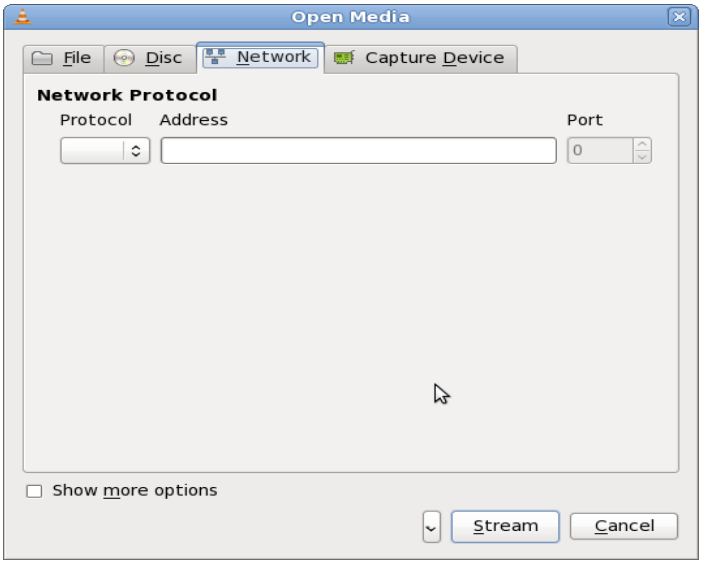
Steps to setup Video Streaming Client using VLC Player

Step I : Open your VLC Player

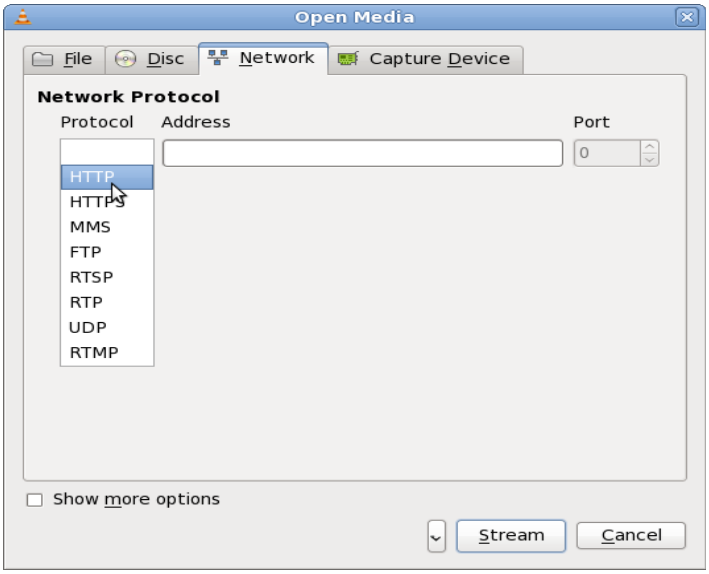
Step II : Click the Media Tab and Click on Streaming Option



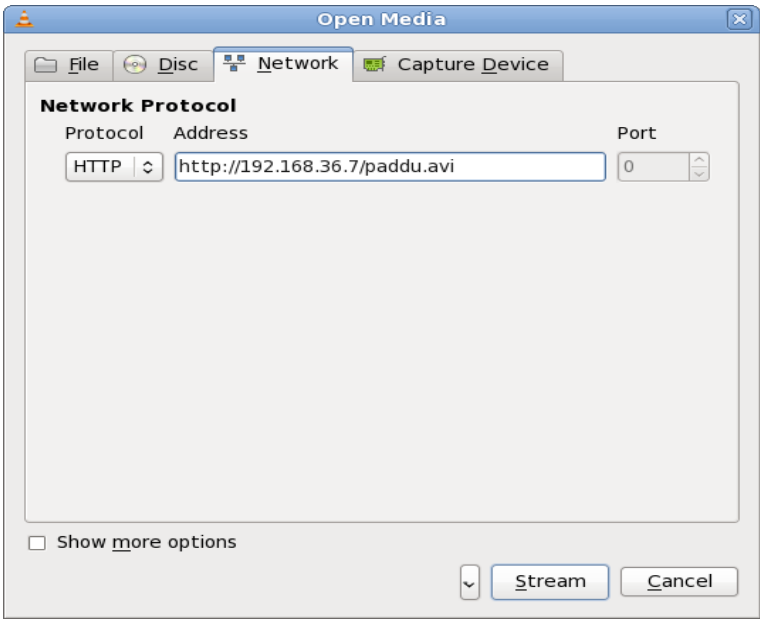
Step III : Click on Network Tab



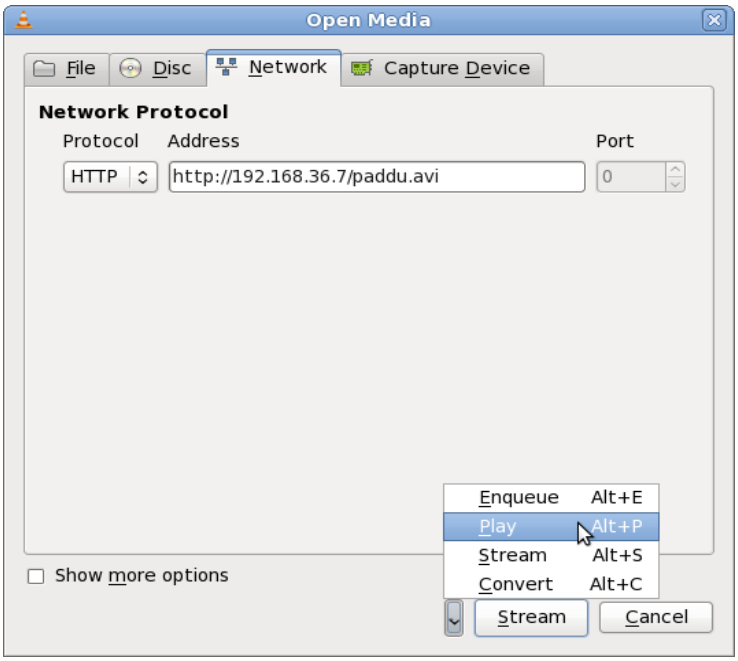
Step IV : Select the protocol as HTTP



Step V : Write the http address in address tab



Step VI : Click the Play option



Step VII : Playing the video

15. BOSS Security

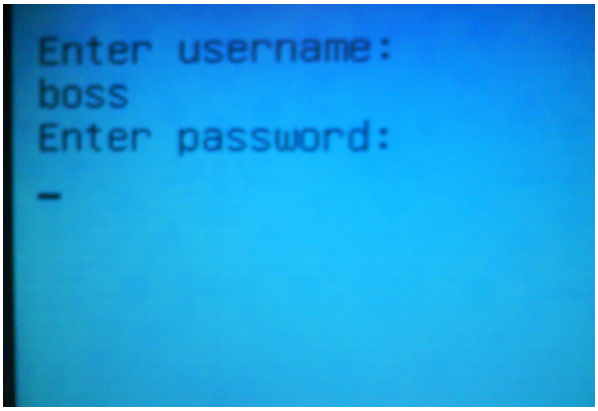
The added security feature ensures that the BOSS System enforced the security and hardened the system effectively. By enabling the security, you have to open the Application “BOSS Security Feature” under the menu **System->Administration.**

The following list are the added security features available in the BOSS 4.0 Desktop

1. Grub password

   The GRUB menu does not allow to boot the selected partition (bootup screen) without giving the username and the password.

   The following screenshot shows that the grub application ask for the username and password.



2. Password and login security

   The following steps are enabled.

a) This feature enables to set the password with minimum charecter length as 8 and maximum as 40.

b) Enabled passwordqc module for password/passphrase strength checking and enforcement.

c) Implemented the old encrypted password history which remembers upto 7 passwords.

d) Implemented the fail delay of password Authentication for the login program.

3. Restricting system reboots through the console

   When the three finger salute (a.k.a. ctrl+alt+del) is given the program will check if any of the users listed in the file /etc/passwd are logged in. If none of them is, shutdown will not reboot the system.

4. Restricting user's access to this system
   The users who are all restricted in the file /etc/security/access.conf will not be able to access the system.

5. Enable Selinux
   SELinux is a Mandatory Access Control (MAC) system which is bydefault enabled in the kernel to confine programs to a limited set of resources.

   SELinux allows more fine grained access controls than traditional Unix permissions offer.

6. Enable Audit

   It provides tools that help the administrative user extract specific types of audit events, audit events for specific users, audit events related to specific file system objects or audit events within a specific time frame .

   It's responsible for writing audit records to the disk. Linux audit files to see who made changes based on program, database files and system calls.

7. Admin group for the su Program
   The administrator has to change the group ownership to admin group. Then the admin group members only able to access the su program. The rest of the users can not run the su program.

8. Disable CD/DVD
   For your security reasons, you may disable the CD/DVD.

9. Disable USB
   For your security reasons, you may disable the USB.

10. Disable Service like telnet imap ftp http
    Disable the services like telnet, rsh imap and http through iptables.

11. Enable Extended Attributes
    Extended attributes are arbitrary name/value pairs which are associated with files or directories. They can be used to store system objects like capabilities of executables and access control lists, as well as user objects.

12. Enable ACL
    The file mode contains nine bits that determine access permissions of a file, plus three special bits. This mechanism allows to define access permissions for three classes of users: the file owner, the file group, and others. This mechanism is very simple. With a couple of bits, many permission scenarios can be modeled.

13. Secure shell configuration
    Secure Shell or SSH is a network protocol that allows data to be exchanged using a secure channel between two networked devices. The encryption used by SSH is intended to provide confidentiality and integrity of data over an insecure network, such as the Internet.

14. Allow Hosts
    It will allow the list of host specified in the file /etc/hosts.allow

15. Deny Hosts
    It will deny the list of host specified in the file /etc/hosts.allow

16. Close list of Opened Applications in the system
    The more services that are running, the more ports that will be left open to intruders. So to protect your system, it's best to turn off any unnecessary services.

17. Close list of Established connections
    The user can identify the established connections in the system. And they are allowed to close the unwanted established connections.

18. Securing Network Access

The following settings can improve the network security of the host and prevent against some network attacks

a. Turned on the Source Address Verification in all interfaces to prevent some spoofing attacks by the following option in the kernel.

net.ipv4.conf.default.rp_filter=1
net.ipv4.conf.all.rp_filter=1

b. Enabled the TCP/IP SYN cookies by the following option in the kernel.

net.ipv4.tcp_syncookies=1

c. Do not accept ICMP redirects (prevent MITM attacks)

net.ipv4.conf.all.accept_redirects = 0
net.ipv6.conf.all.accept_redirects = 0

d. Accept ICMP redirects only for gateways listed in our default gateway list (enabled by default)

net.ipv4.conf.all.secure_redirects = 1

e. Do not send ICMP redirects (Dont make the system as router)

net.ipv4.conf.all.send_redirects = 0

f. Do not accept IP source route packets (Dont make the system as router)

net.ipv4.conf.all.accept_source_route = 0
net.ipv6.conf.all.accept_source_route = 0

g. Log Martian Packets

net.ipv4.conf.all.log_martians = 1

You are allowed to change the above options in the file /etc/sysctl.conf and it will be effected by running the following command.

sysctl -p

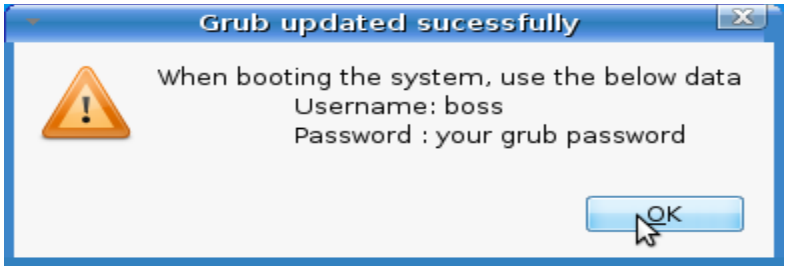
15.1 Enabling Security Features

Open the Application **System->Administration -> BOSS Security Feature.** Now click the Option “Enable All Security Features”

Select the Option “Enable All Security Features”. After clicking “ok” button, it ask for grub password.

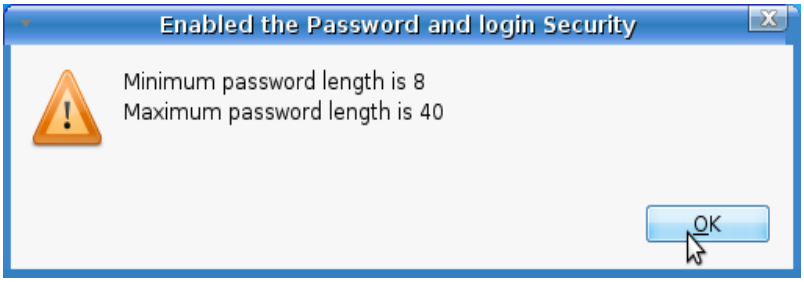
Grub password

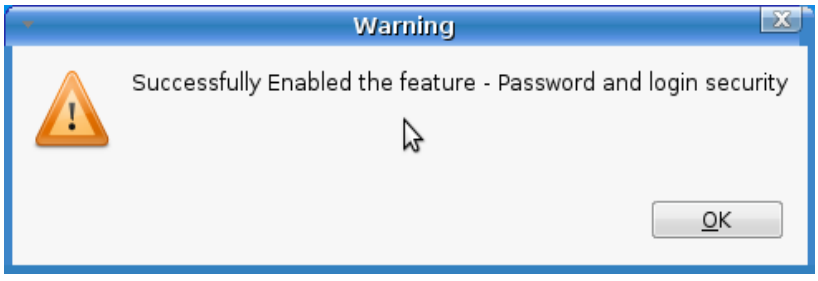
After entering the password click ok it shows following alert window.That is, while booting you have to use the following username as boss and the password as you entred grub password.



Password and login security

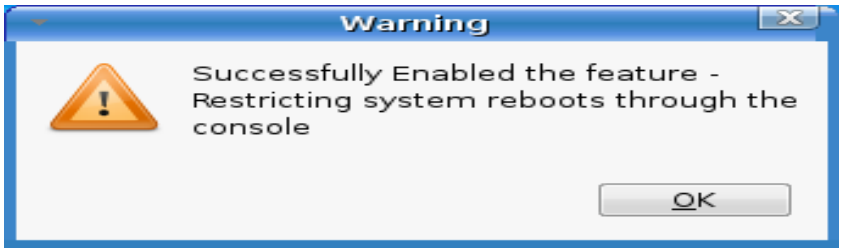
After enabling the features, it confirms the following message





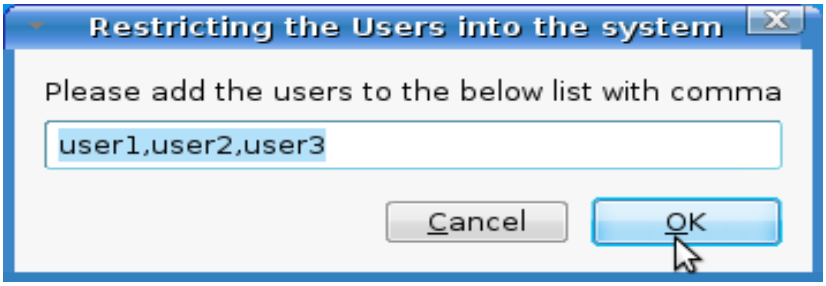
Restricting system reboots through the console

After enabling the features, it confirms the following message

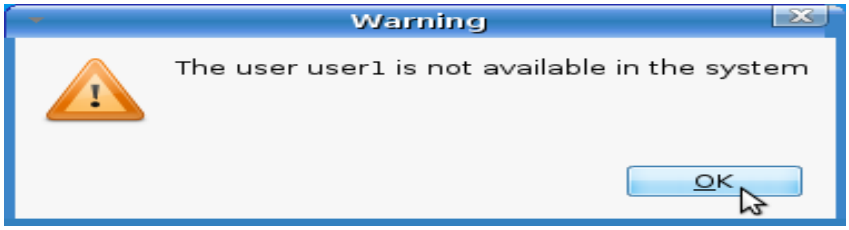


Restricting user's access to this system

Enter the users with comma to whom you want to restrict the system. If the entered user is not in the system, it will ask once again. Here the users user1,user2 and user3 is not in the system.

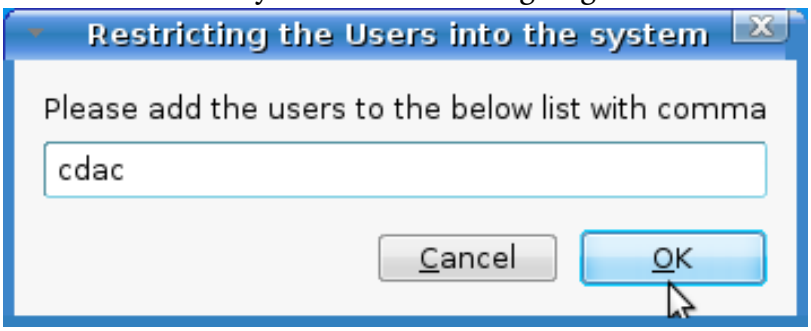


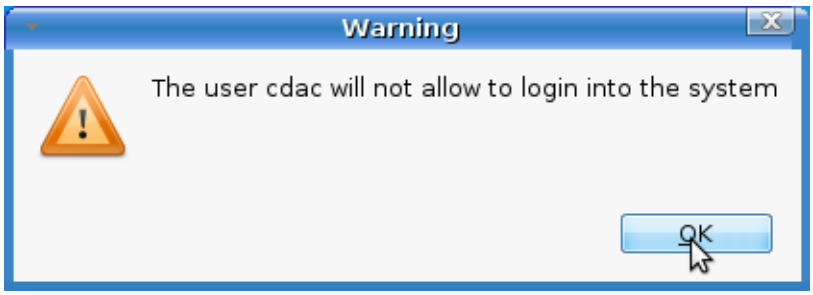
After clicking ok Its shows



No users available in the system and so it will ask to enter user names.

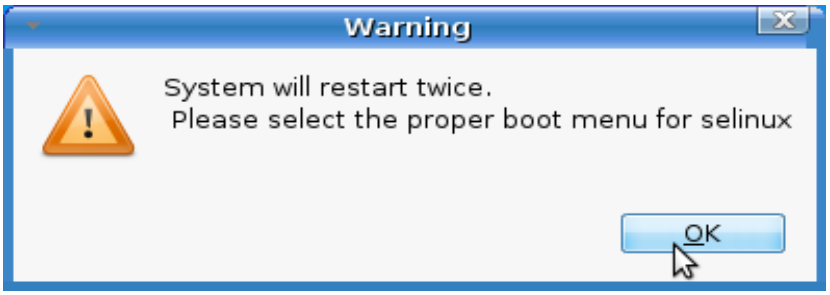
Now the user cdac available in the system and so he is going to be restricted in this system.

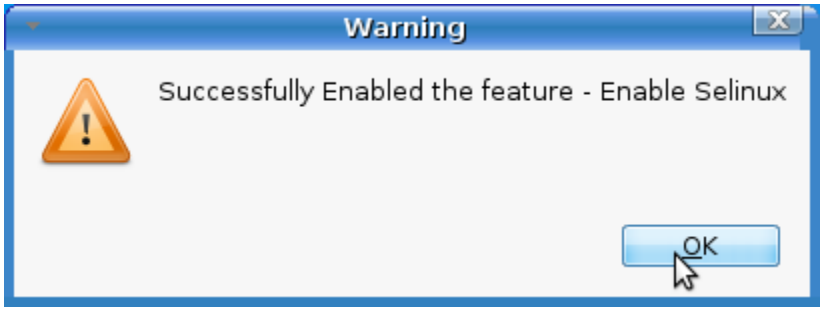




Enable Selinux

- SELinux is a Mandatory Access Control (MAC) system which is a kernel (LSM) enhancement to confine programs to a limited set of resources.
- SELinux allows more fine grained access controls than traditional Unix permissions offer.

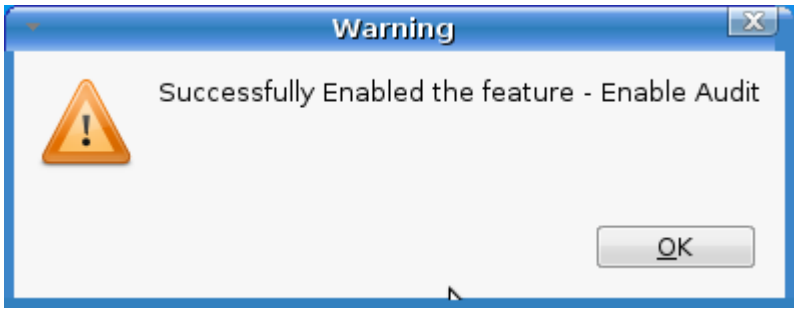




Enable Audit

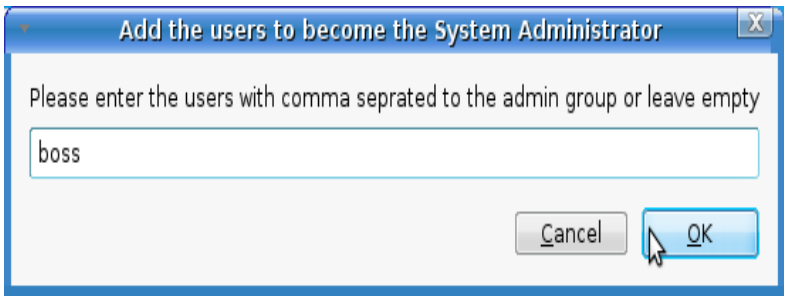
It provides tools that help the administrative user extract specific types of audit events, audit events for specific users, audit events related to specific file system objects or audit events within a specific time frame .

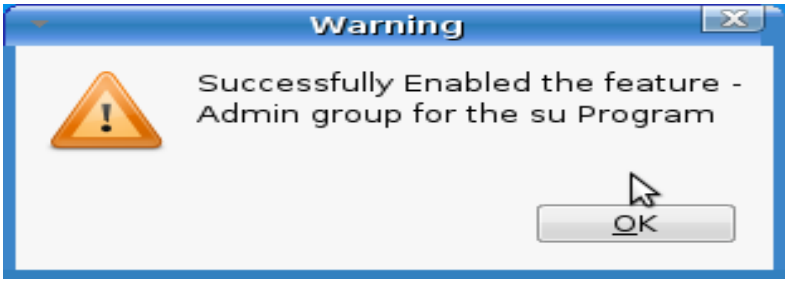
- It's responsible for writing audit records to the disk. Linux audit files to see who made changes based on program, database files and system calls.



Admin group for the su Program

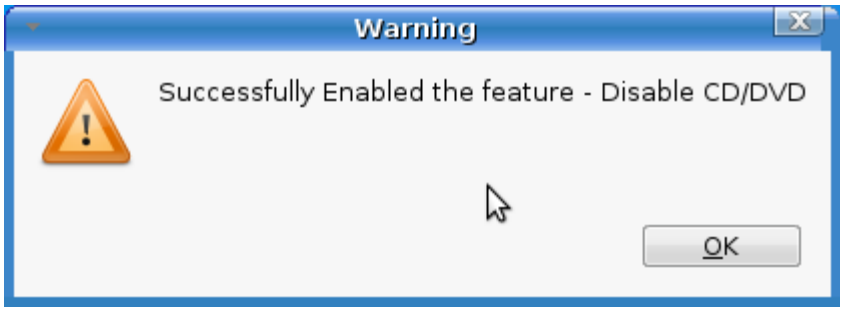
● The administrator has to change the group ownership to admin group. Then the admin group members only able to access the su program. The rest of the users can not run the su program.


Add the users to become the System Administrator
Please enter the users with comma seprated to the admin group or leave empty
boss
Cancel
OK

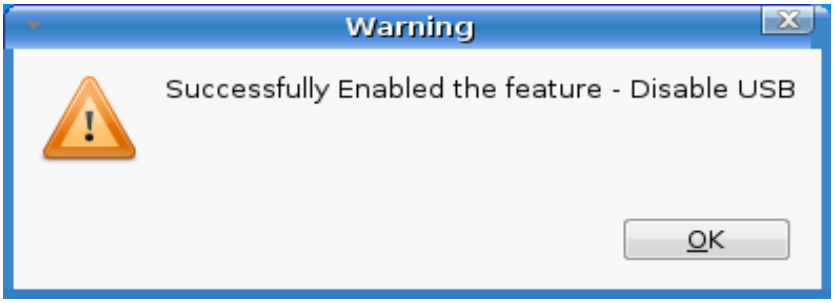


Enabling - Disable CD/DVD

This features is selected then the CD Drive or DVD Drive will be disabled.



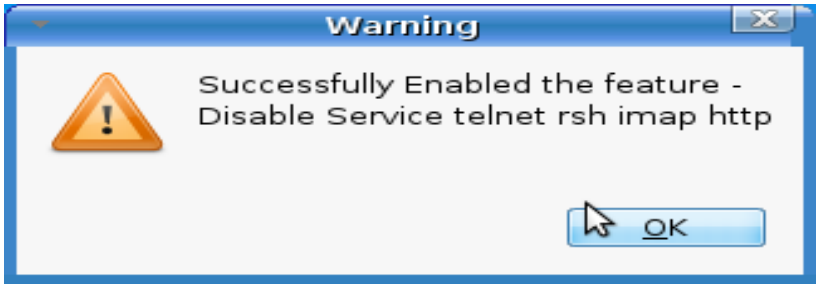
Enabling-Disable USB



This feature is disable all the USB Ports available in the computer.

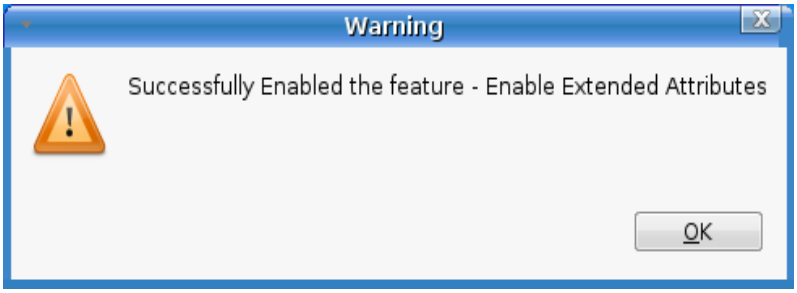
Disable Services-telnet imap ftp http

- Disable the services like telnet, rsh imap and http through iptables.



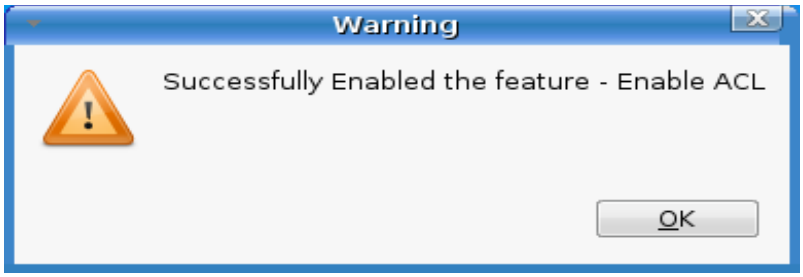
Enable Extended Attributes

● Extended attributes are arbitrary name/value pairs which are associated with files or directories. They can be used to store system objects like capabilities of executables and access control lists, as well as user objects.



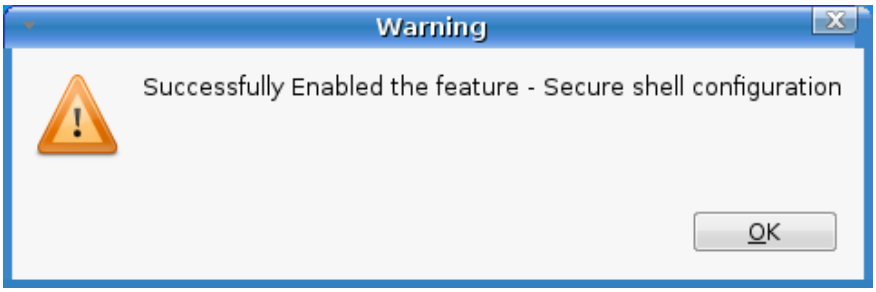
Enable- Access Control Lists

● The file mode contains nine bits that determine access permissions of a file, plus three special bits. This mechanism allows to define access permissions for three classes of users: the file owner, the file group, and others. This mechanism is very simple. With a couple of bits, many permission scenarios can be modeled.



Secure Shell configuration

Secure Shell or SSH is a network protocol that allows data to be exchanged using a secure channel between two networked devices.[1] The encryption used by SSH is intended to provide confidentiality and integrity of data over an insecure network, such as the Internet.



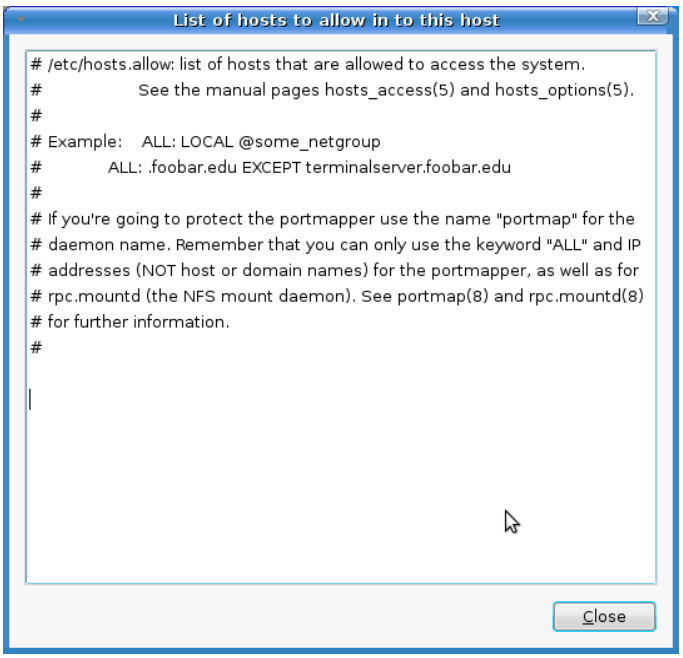
Allow Hosts and Deny Hosts

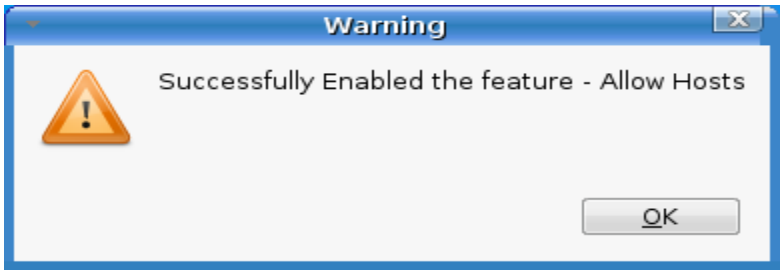
To determine if a client machine is allowed to connect to a service, TCP wrappers reference the following two files, which are commonly referred to as hosts access files:

/etc/hosts.allow
/etc/hosts.deny

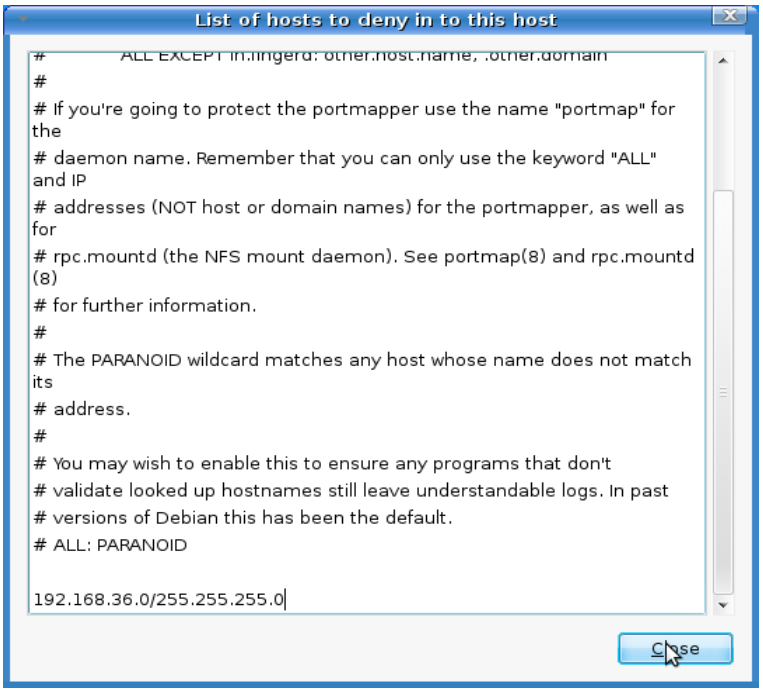
When a client request is received by a TCP wrapped service, it takes the following basic steps:

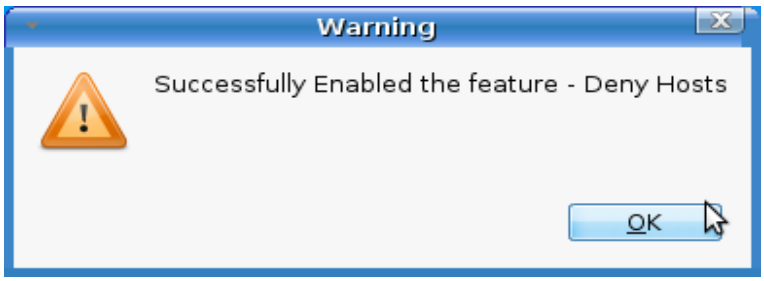
1.The service references /etc/hosts.allow. — The TCP wrapped service sequentially parses the /etc/hosts.allow file and applies the first rule specified for that service. If it finds a matching rule, it allows the connection. If not, it moves on to step 2.


List of hosts to allow in to this host
/etc/hosts.allow: list of hosts that are allowed to access the system.
See the manual pages hosts_access(5) and hosts_options(5).
#
Example: ALL: LOCAL @some_netgroup
ALL: .foobar.edu EXCEPT terminalserver.foobar.edu
#
If you're going to protect the portmapper use the name "portmap" for the
daemon name. Remember that you can only use the keyword "ALL" and IP
addresses (NOT host or domain names) for the portmapper, as well as for
rpc.mountd (the NFS mount daemon). See portmap(8) and rpc.mountd(8)
for further information.
#
Close



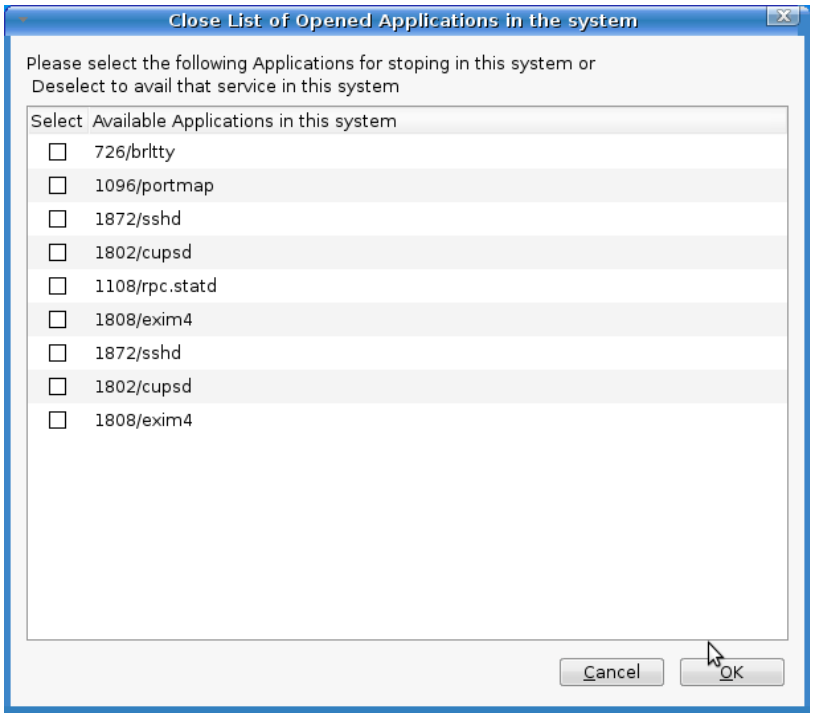
2.The service references /etc/hosts.deny. — The TCP wrapped service sequentially parses the /etc/hosts.deny file. If it finds a matching rule is denies the connection. If not, access to the service is granted.


List of hosts to deny in to this host
ALL EXCEPT in.fingerd: other.host.name, .other.domain
#
If you're going to protect the portmapper use the name "portmap" for the
daemon name. Remember that you can only use the keyword "ALL" and IP
addresses (NOT host or domain names) for the portmapper, as well as for
rpc.mountd (the NFS mount daemon). See portmap(8) and rpc.mountd (8)
for further information.
#
The PARANOID wildcard matches any host whose name does not match its
address.
#
You may wish to enable this to ensure any programs that don't
validate looked up hostnames still leave understandable logs. In past
versions of Debian this has been the default.
ALL: PARANOID
192.168.36.0/255.255.255.0
Close

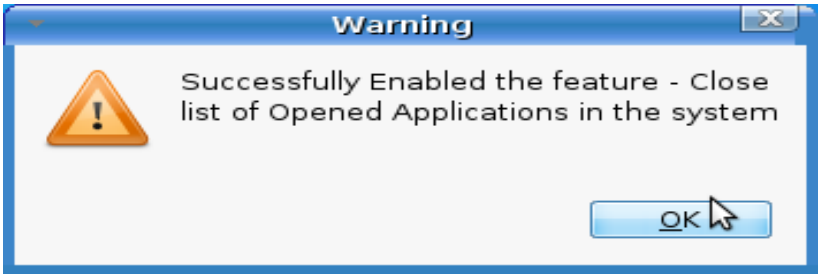


Close list of Opened Applications in the system

The more services that are running, the more ports that will be left open to intruders. So to protect your system, it's best to turn off any unnecessary services.

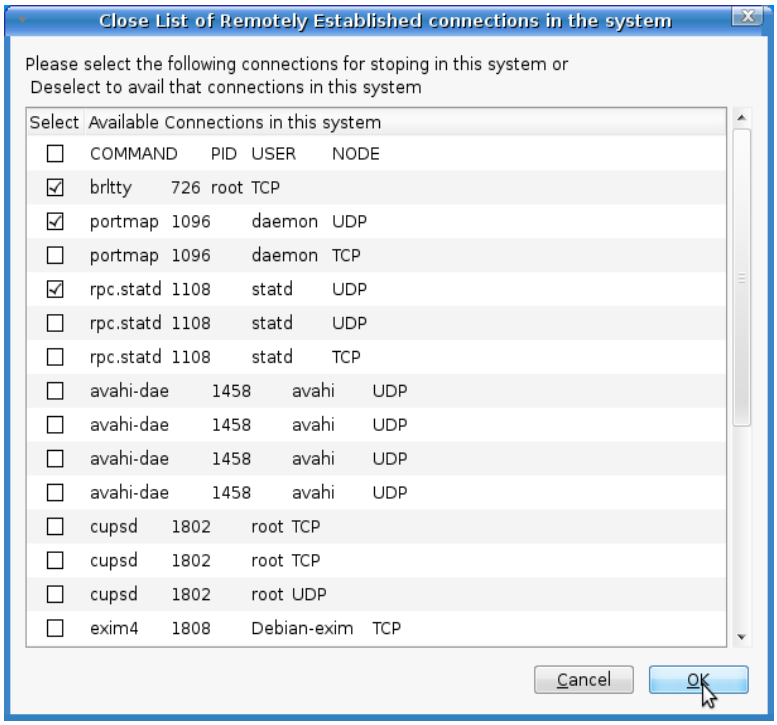


Select the applications you want to close.

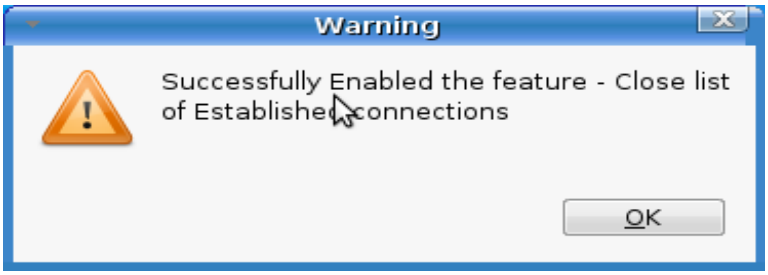


Close list of Established connections

The more services that are running, the more ports that will be left open to intruders. So to protect your system, it's best to turn off any unnecessary services.


Close List of Remotely Established connections in the system
Please select the following connections for stoping in this system or
Deselect to avail that connections in this system
Select Available Connections in this system
COMMAND PID USER NODE
brltty 726 root TCP
portmap 1096 daemon UDP
portmap 1096 daemon TCP
rpc.statd 1108 statd UDP
rpc.statd 1108 statd UDP
rpc.statd 1108 statd TCP
avahi-dae 1458 avahi UDP
avahi-dae 1458 avahi UDP
avahi-dae 1458 avahi UDP
avahi-dae 1458 avahi UDP
cupsd 1802 root TCP
cupsd 1802 root TCP
cupsd 1802 root UDP
exim4 1808 Debian-exim TCP
Cancel
OK

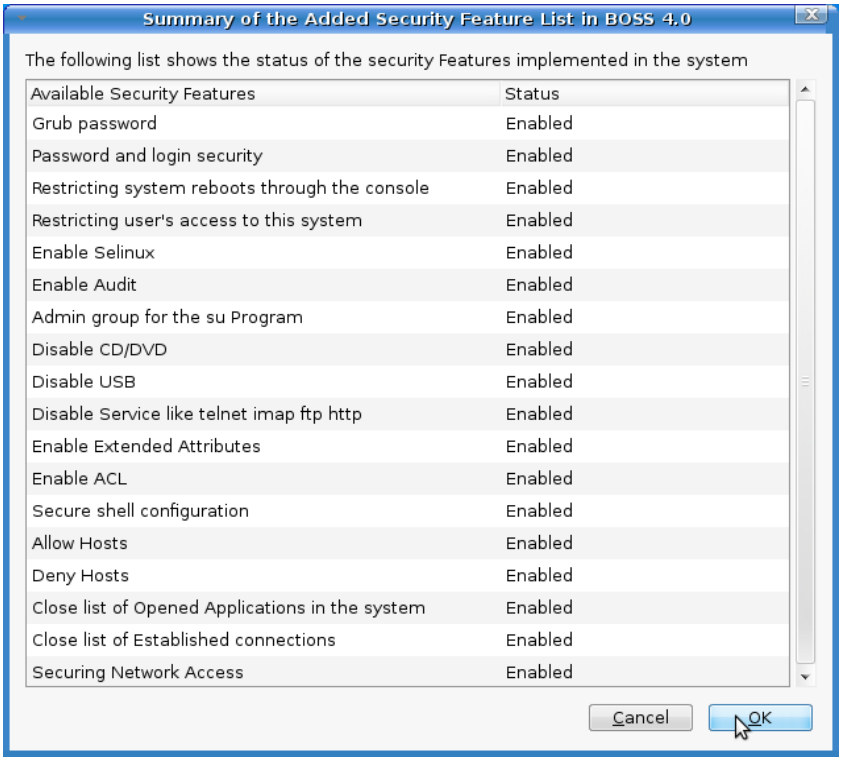
Select the applications you want to close the established connections with other.



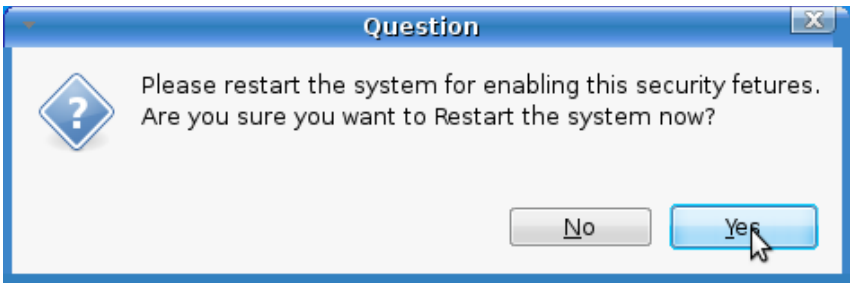
Securing Network Access

Enabled the spoof protection, TCP/IP SYN cookies, not accepting ICMP redirects, not accepting IP source route packets and Log Martian Packets.

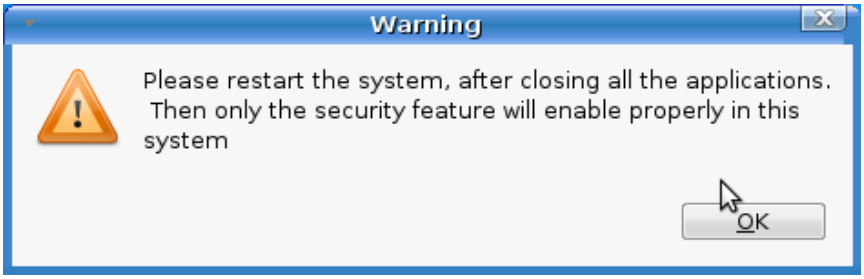
Now the below wizard shows the enabled security features in the system.



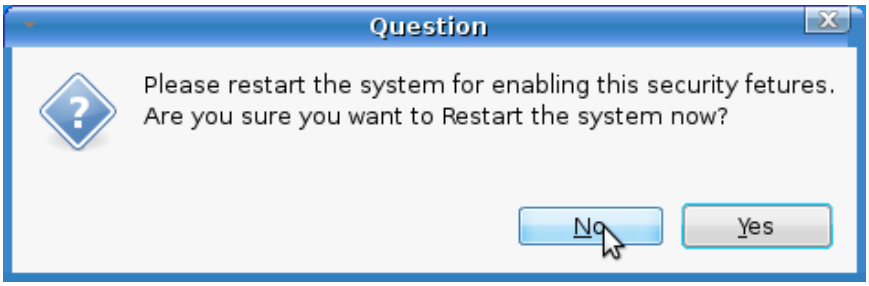
Click 'OK' to restart the system to applying security features.


Question
Please restart the system for enabling this security fetures.
Are you sure you want to Restart the system now?
No
Yes

If Click 'Yes' it shows close all the applications currently running on the system.

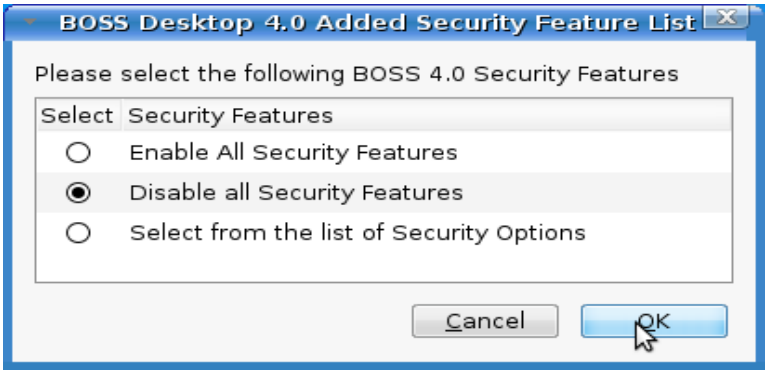

Warning
Please restart the system, after closing all the applications. Then only the security feature will enable properly in this system
OK

Then Click OK to restart the system

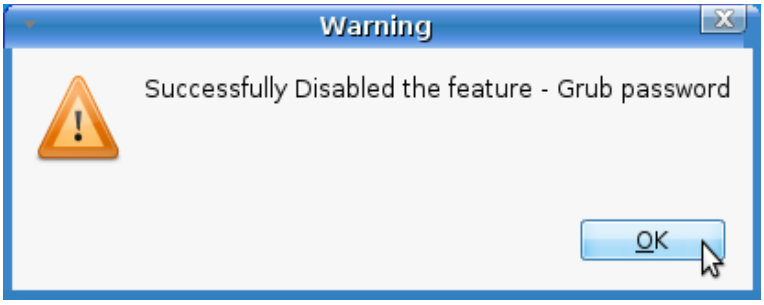

Question
Please restart the system for enabling this security fetures. Are you sure you want to Restart the system now?
No
Yes

15.2 Disabling Security Features

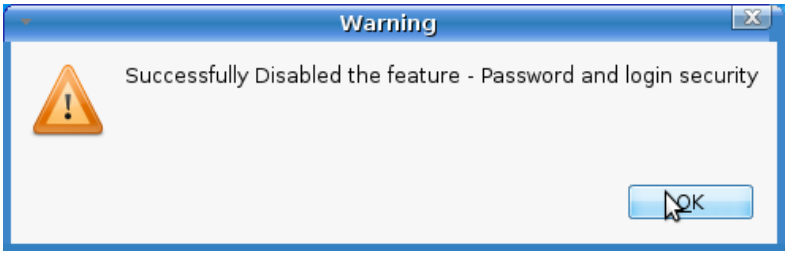
To Disable all the security features select the option called “Disable all Security Features”.



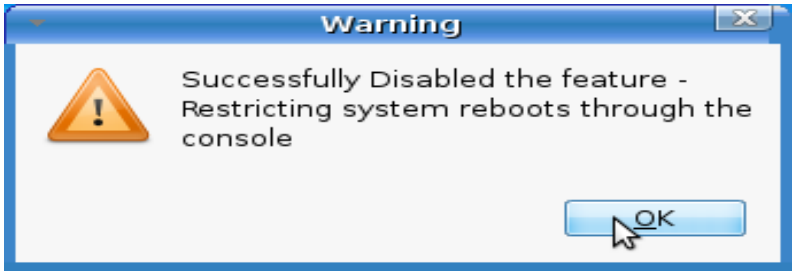
Click “OK” to proceed the disabling the security features.First Disable the grub password.



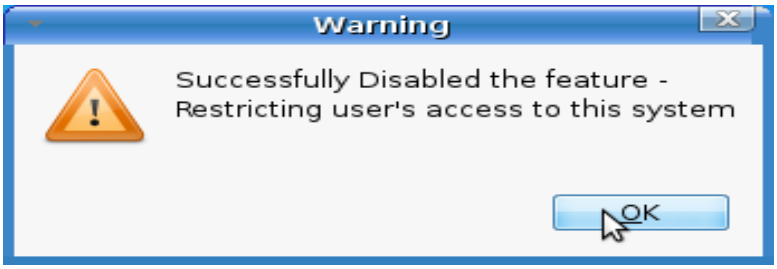
Next “Password and Login Security” feature is Disabled.



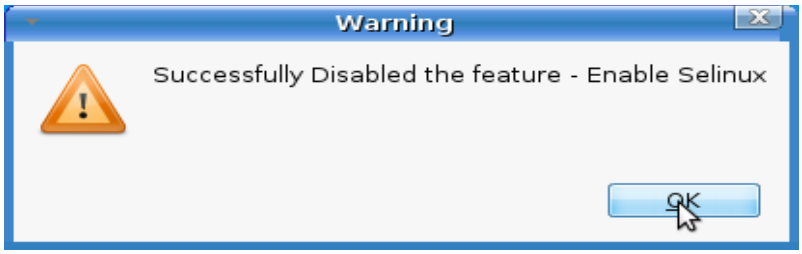
Next “Restricting system reboots through console” feature is disabled.



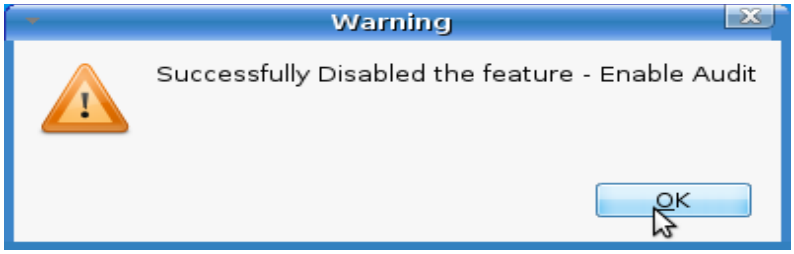
Next “Restricting User's Access to the system” feature is Disabled.



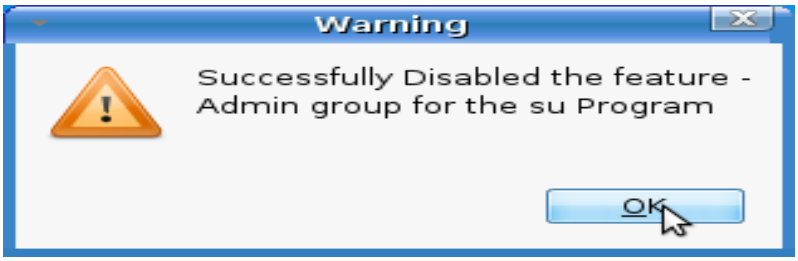
Next “ Enable Selinux ” feature is Disabled.



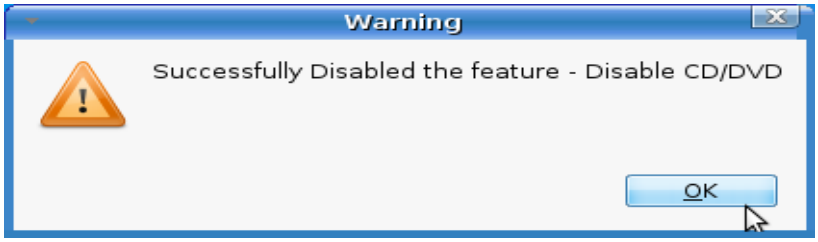
Next “ Enable Audit ” feature is Disabled.



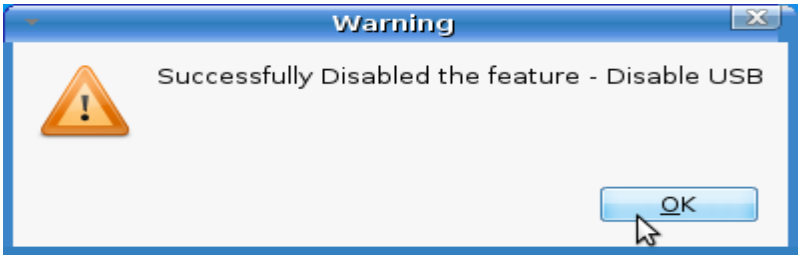
Next “ Admin Group for the su program ” feature is Disabled.



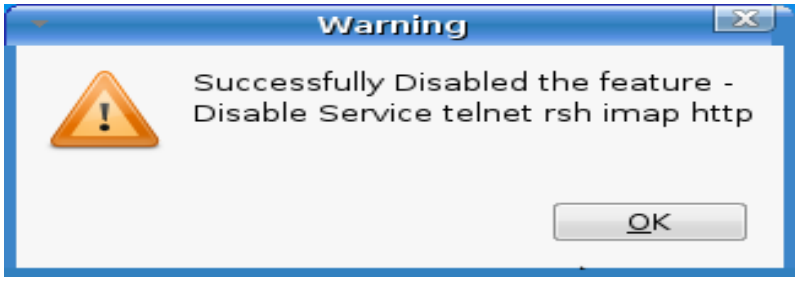
Next “ Disable CD/DVD ” feature is Disabled.



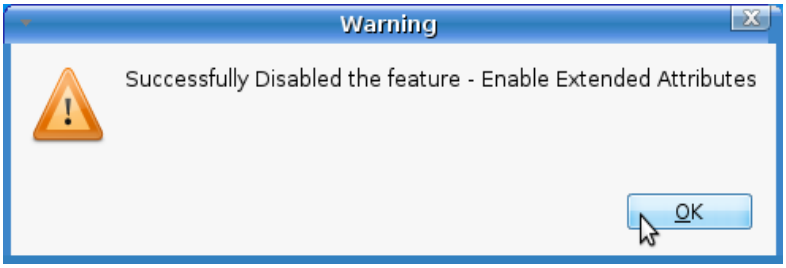
Next “ Disable USB ” feature is Disabled.



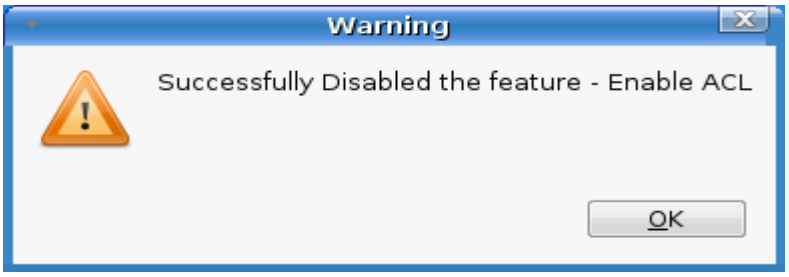
Next “ Disable Service rsh telnet imap http ” feature is Disabled.



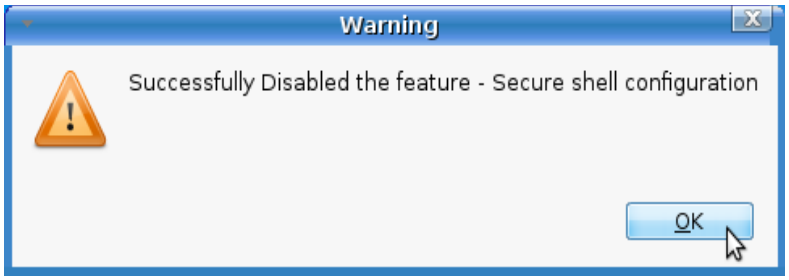
Next “ Enable Extended Attributes” feature is Disabled.



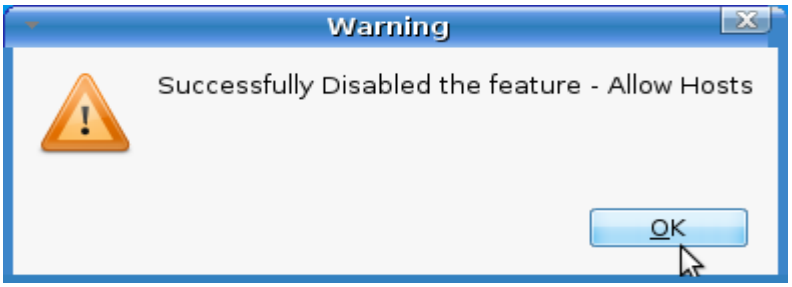
Next “ Enable ACL ” feature is Disabled.



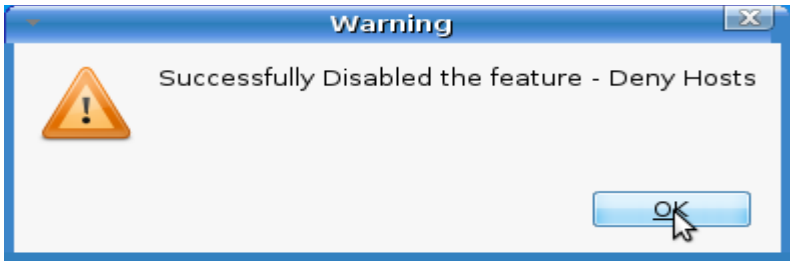
Next “ Secure Shell Configuration ” feature is Disabled.



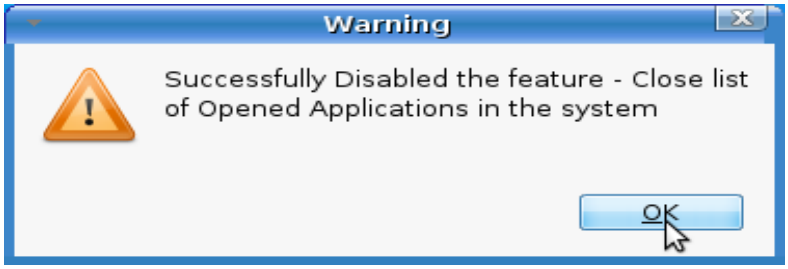
Next “ Allow Hosts ” feature is Disabled.



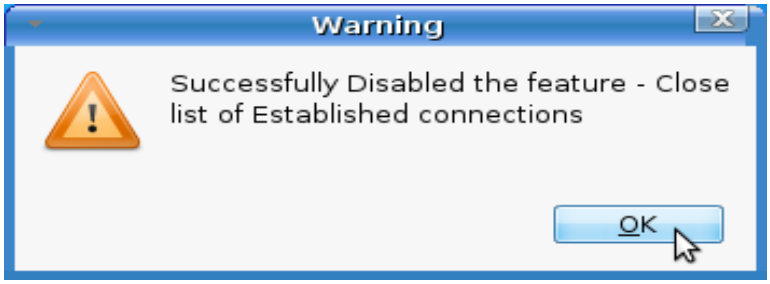
Next “ Deny Hosts ” feature is Disabled.



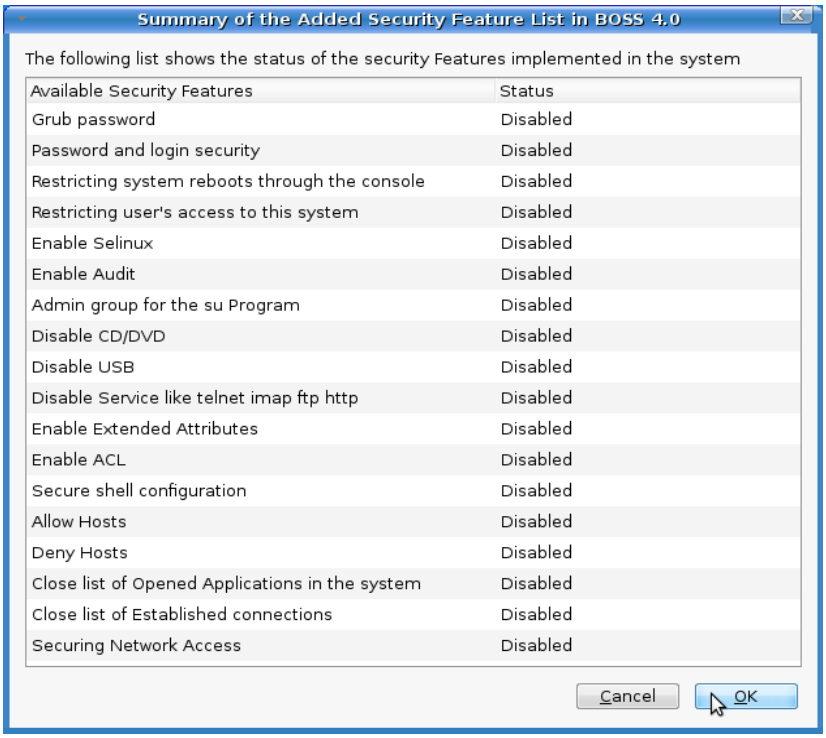
Next “ Close List of Opened Applications in the system ” feature is Disabled.



Next “Close List of Established Connections ” feature is Disabled.



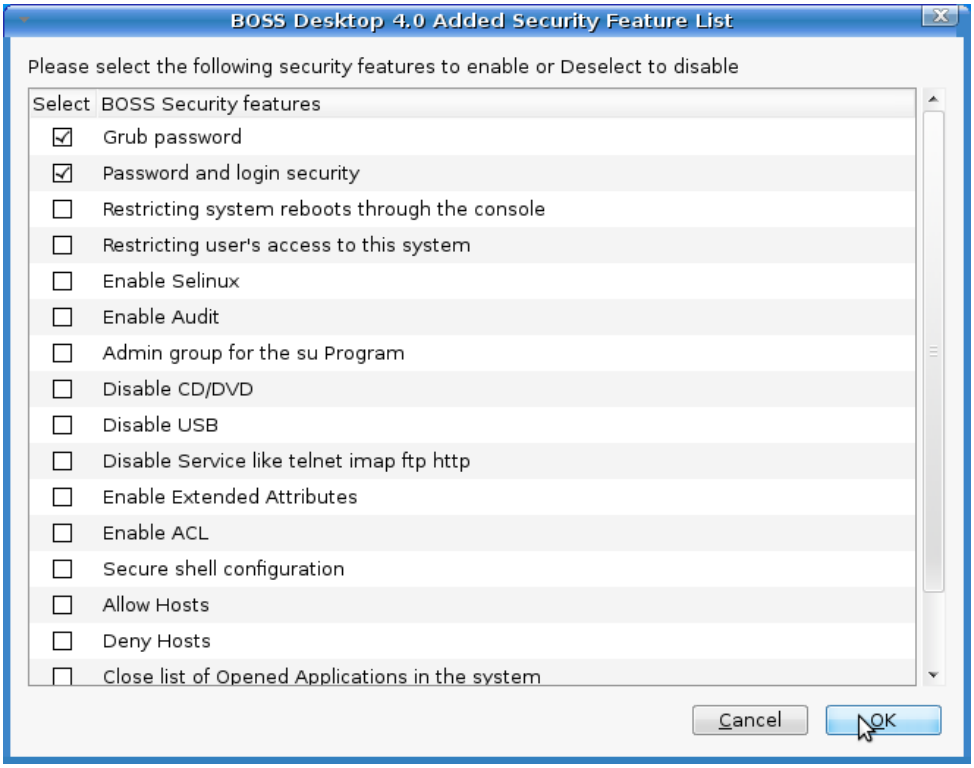
After all the security features are disabled it shows following


Summary of the Added Security Feature List in BOSS 4.0
The following list shows the status of the security Features implemented in the system
Available Security Features | Status
Grub password | Disabled
Password and login security | Disabled
Restricting system reboots through the console | Disabled
Restricting user's access to this system | Disabled
Enable Selinux | Disabled
Enable Audit | Disabled
Admin group for the su Program | Disabled
Disable CD/DVD | Disabled
Disable USB | Disabled
Disable Service like telnet imap ftp http | Disabled
Enable Extended Attributes | Disabled
Enable ACL | Disabled
Secure shell configuration | Disabled
Allow Hosts | Disabled
Deny Hosts | Disabled
Close list of Opened Applications in the system | Disabled
Close list of Established connections | Disabled
Securing Network Access | Disabled
Cancel
OK

15.3 Customized Security Features

To Select the security features that the user want , select the option called “Select from the list of Security Options Features”.

Click “OK” it shows following



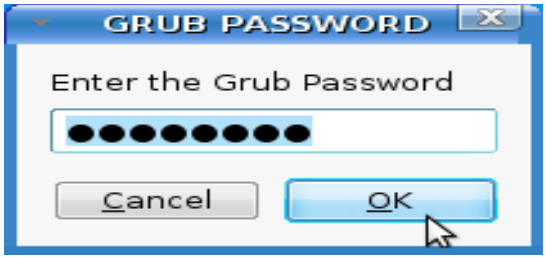
Select the security features you want to enable int the system.

User selected two security features,

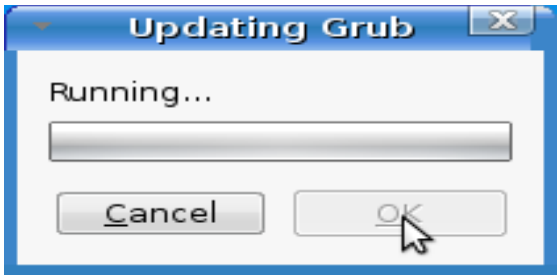
1.grub password

2.password and login security

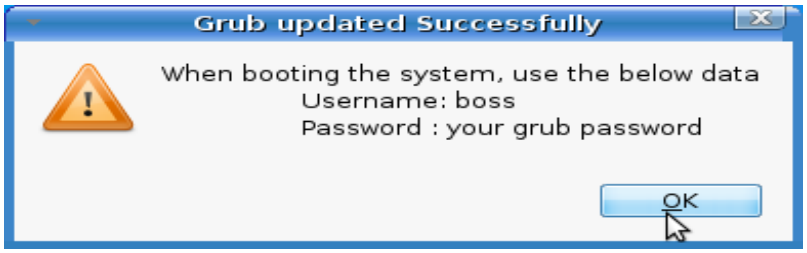
then click “OK” it shows the following wizard to set the grub password



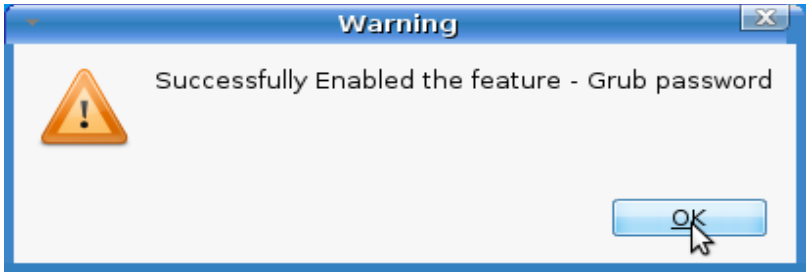
After click “OK” it shows updating grub status.



After updating the grup password alert window opened to show the grub is updated successfully.

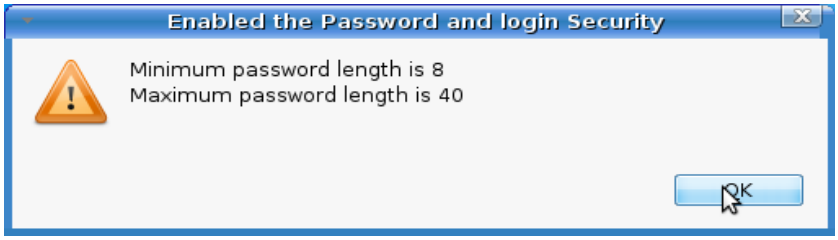


Then alert window opened says “grub password” feature is enabled.

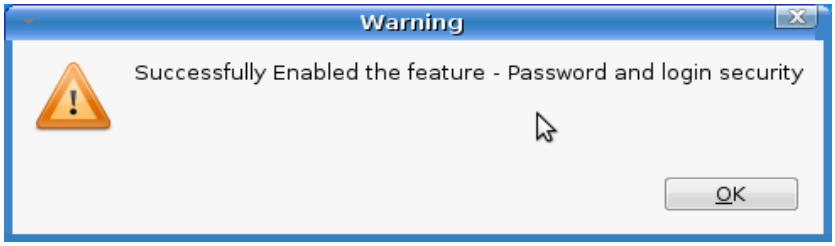


Password and Login Security

An alert window instruct the user ,the password length shuld be minimum 8 characters and maximum 40 characters.



Then click “OK” that will shows security features is enabled.



For each unselected security feature an alert window opened and says corresponding features are disabled status will displayed in that window.

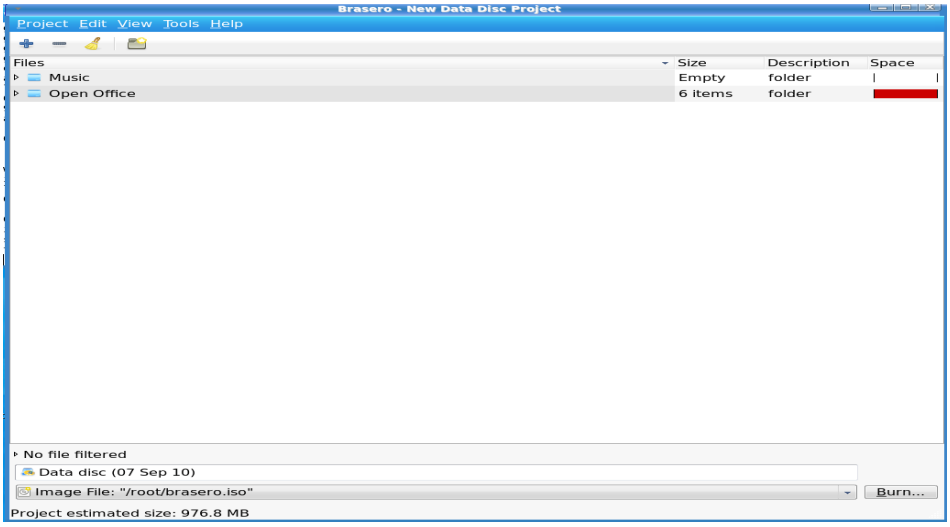
16. Burning CDs and DVDs

Brasero Disc Burner is a CD and DVD burning application for Linux systems optimized for GNOME. It provides a comfortable user interface to perform most CD/DVD burning tasks like creating an Audio CD from a set of audio files or copying a CD.

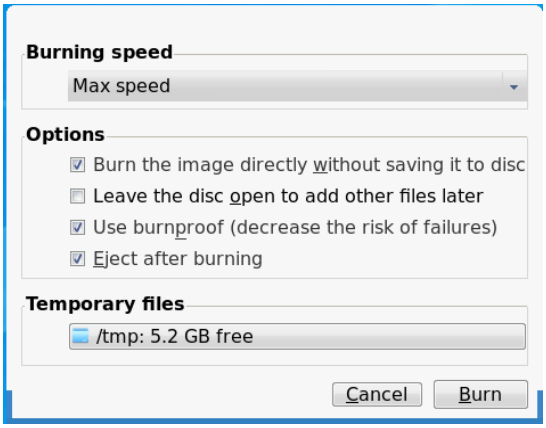
To start the application, select **Applications** -> **Sound & Video** -> **Brasero Disc Burner** or type **brasero** in terminal and press *Enter*.

16.1 Creating a Data CD or DVD

To create a Data CD choose “Data CD” from the Compilation Browser. To create a Data DVD choose “Data DVD” from the Compilation Browser. Then drag the files you want to burn on the CD or DVD from the Filesystem Browser to the Compilation Browser.



Then press “Burn” in the lower right corner. After clicking it, you will see the following dialog:



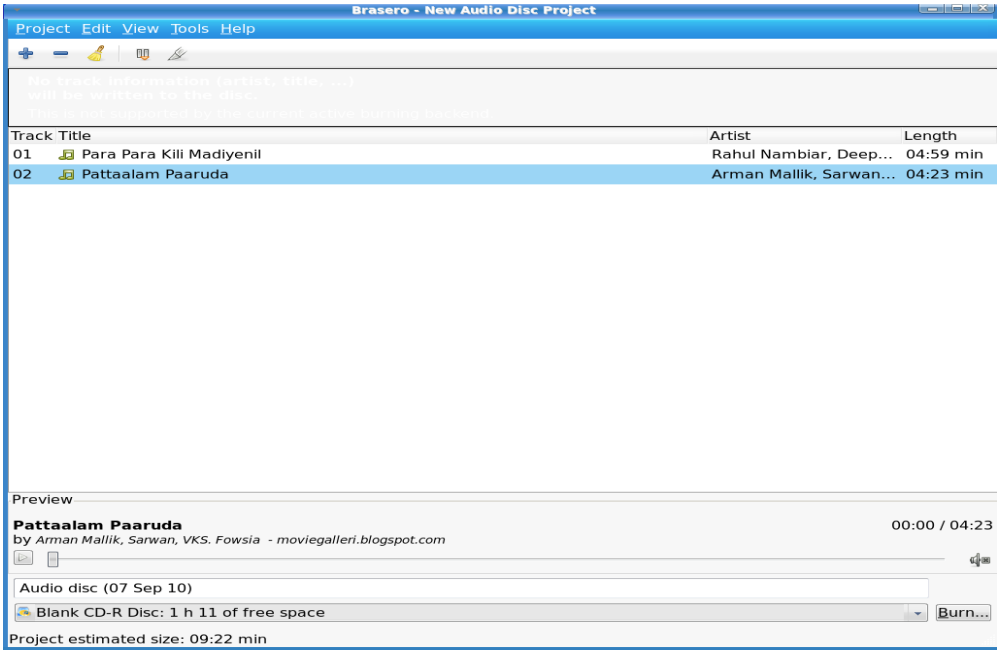
•Use the “Writer” dropdown menu to select your writer.

•Select the speed that you want to burn the CD.

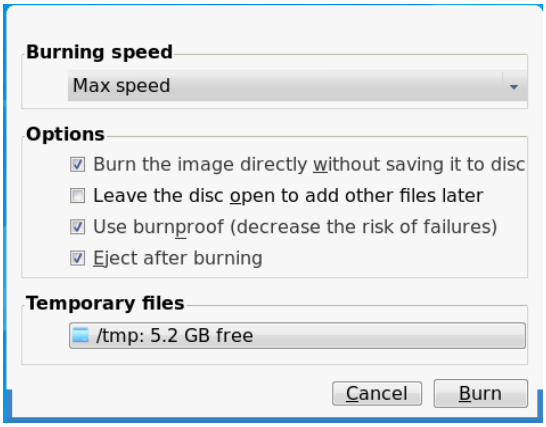
•Select the “Eject disk” option so Brasero would eject the disc after finishing the writing.

16.2 Creating an Audio CD

To create an Audio CD choose “Audio CD” from the Compilation Browser. Then drag the music files you want to burn on the CD from the Filesystem Browser to the Compilation Browser.



Then press the “Burn” button in the lower right corner. After clicking it, you will see the following dialog:



•Select the maxmium speed that you want to burn the CD.

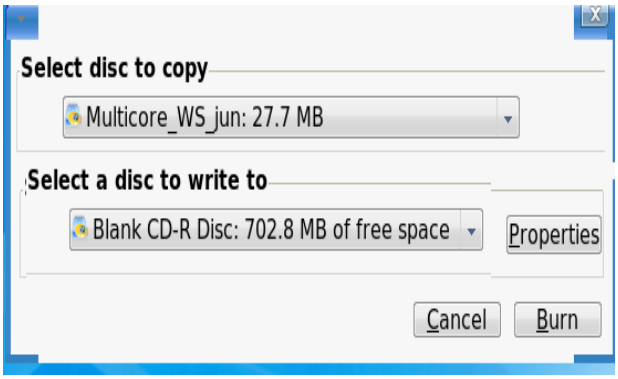
•Select Leave the disc open to add more files for multisession enabled disc writing.

•Select burnproof to reduce possibility of discs failure.

•Select the “Eject disk” option so Brasero would eject the disc after finishing the writing.

16.3 Copying a Data or Audio CD or DVD

To copy, choose **File-> New Project->Copy Disc** depending upon your media. The application will show the following dialog:



•select the disc to copy source disk contains data have to write to the blank disc.

•Select a disc to write to is destination disc have writeable CD or DVD

•Click properties to change the speed of write-able CD or DVD

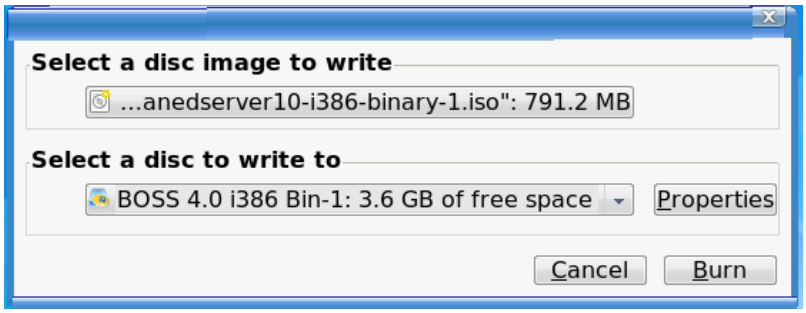
16.4 Blank a CD-RW

To erase a CD-RW, choose **Tools -> Blank**. The application will show the following dialog:

- from the drop down list select a disc to erase.
- Select the speed that you want to burn the CD.
- Select the “Fast blank” option to activate this method of blanking.
- Progress bar shows the perentage completed blanking processing.

16.5 Burn an ISO Image

To burn an ISO image, choose **Tools -> Burn CD Image**. Navigate through the directories and after selecting the ISO file which you want to burn, press “OK”.



17. Partition Editor

Partition Editor is the Gnome Partition Editor application. Partition Editor is an industrial-strength package for creating, destroying, resizing, moving, checking and copying partitions, and the file systems on them. This is useful for creating space for new operating systems, reorganizing disk usage, copying data residing on hard disks and mirroring one partition with another (disk imaging).

To work with partition table, click, **System ->Administration -> Partition Editor** or type **gparted** in terminal and press *Enter*.

If you click the “Gparted” menu(at the top left), a pop down menu is presented. You can select “Refresh Devices” to refresh the display of the drives on your system. As well, a keyboard shortcut(*Ctrl+R*) can also be used to refresh the screen information. With the second choice, you can choose the hard drive whose partitions you want to modify. This is useful if you have more than one hard drive. The third option under “Gparted” menu is used to obtain more information. It opens a new window from which you can see the supported file-types and some partition editing options.

The “Edit” menu shows two greyed out functions which are quite useful: Undo and Apply. These options may also be seen in the toolbar. To activate them, you must choose a partition you wish to modify.

The “View” menu allows you to access/view other areas :

Device Information: The device information panel displays details about the hard disk, such as Model, Size etc. This panel is most useful in a multi hard disk system, where the information is used to confirm that the hard disk being examined is the one that is wanted.

Pending Operations: At the footing window is a list of pending operations. The information is useful as it provides an indication of the number of pending operations.

“Device” menu allows you to set a Disk Label....

If the current disk label is inappropriate, you may change it using **Device -> Set Disklabel...** option.

The “Partition” menu is most import. It allows you to do many operations, we can create a new partition, some of which are dangerous. Select “Delete” if you want to delete a partition. To perform the delete, you must first select the partition.

“Resize/Move” is a useful function. we can resize or move a partition using this option.

You may also format any partition to a file system which is supported in the menu.

The last choice gives information about the selected partition.

Note: Before doing any of the following operations, make sure that the partitions are unmounted.

Few operations:

Creating a new partition:

Select an unallocated area and click the “New” button in the toolbar to create a new partition. A new window appears and lets you chose the size, file system, type of partition etc.5,

Deleting a partition:

The second icon on the toolbar is for deleting the selected partition. If you want to delete a partition, select that partition and click the “Delete” icon and then click “Apply”.

Resizing a partition:

At the top right-end of the screen there is a drop-down box where you can choose the hard disk you want to work on, if you have several hard drives on the PC/machine. Remember that this will only become operational after the scan is completed.

Click the partition that is to be resized and then select “Resize/Move” from the “Partition” menu or click “Resize/Move” icon from the toolbar.

Now you can increase or decrease the size of the partition. If you have free space in that partition, then only you can decrease the size of the partition. If you have free space in the hard disk then only you can increase the size of the partition.

Once you have done your job, click on “Apply”. No operations are given to the hard disk until you click “Apply”.

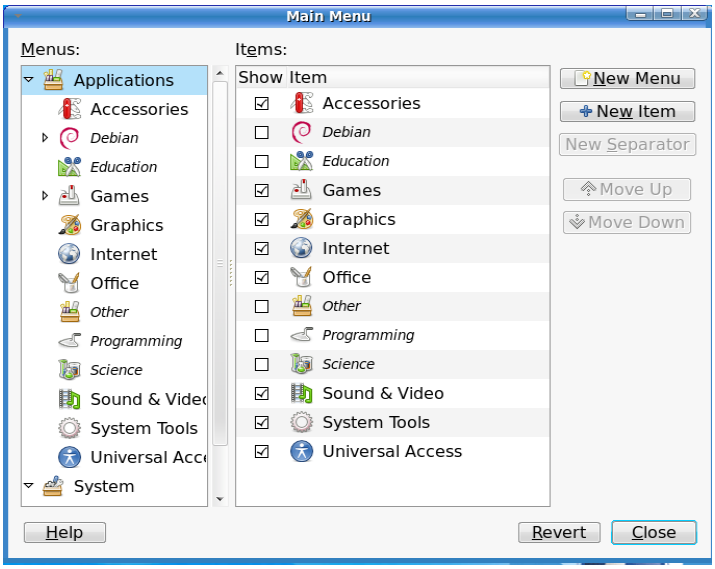
Copying a partition: You must first select the partition you want to copy. Right-click on the partition and click “Copy”. After copying the partition, you must choose an unallocated area to activate “Paste” button. You may wish to resize the partition you want to paste: same size or bigger? (A smaller partition is impossible!). After you have pasted, you can click "Apply".

18. Changing the name of Applications in BOSS

If you like to change the name of the applications, BOSS gives you an option to change those names.

Choose **System -> Preferences -> Main Menu**

A window appears as shown in the figure.

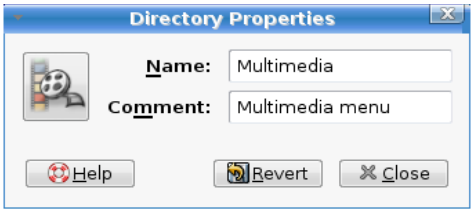


18.1 Changing the name of main menu

Follow these steps to change the name of main menu:

1. Double-click the application name to change the name of that application. For eg: to change the name of Sound & Video to any other name(eg:Multimedia) in Items double-click on “Sound & Video”. A window appears as shown in the figure.

2. Change the name “Sound & Video” to “Multimedia”.

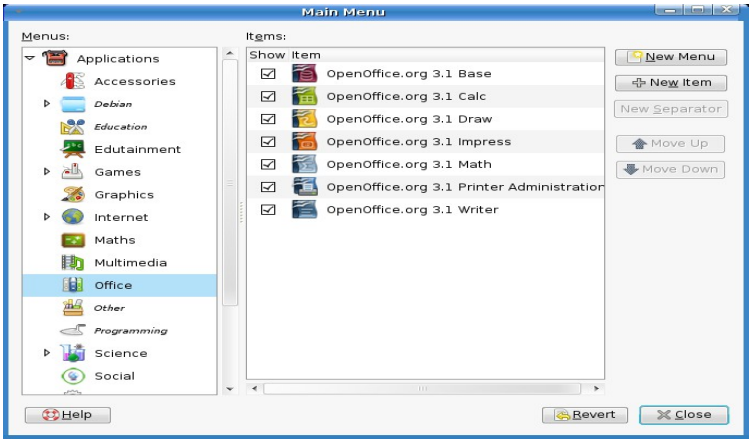


3. Click “Close”. Also in the window titled “Main Menu” click the “Close” button.
4. Click Applications. You can see that the name “Sounds & Video” has been changed to “Multimedia”.

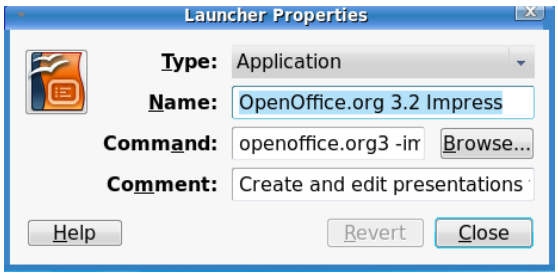
18.2 Changing the name of sub menu

Follow these steps to change the name of sub menu:

1. For eg: to change the name of OpenOffice.org 3.2 Impress to another name(eg:Presentation) click “Office” in Menus.

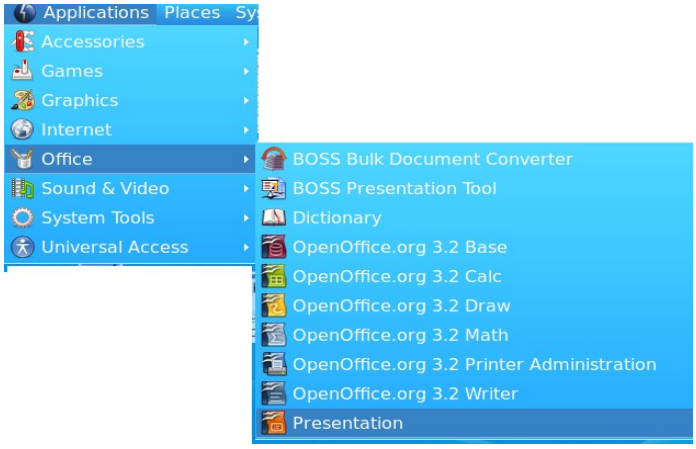


2. From Items double-click “OpenOffice.org 3.2 Impress”. A window titled “Launch Properties” appears.



Change the name “OpenOffice.org 3.2 Impress” to “Presentation”.

3. Click “Close”. Also in the window titled “Main Menu” click the “Close” button.
4. Click **Applications -> Office.** The name “OpenOffice.org 3.1 Impress” has been changed to “Presentation”.



19. How to install *ANYTHING* in BOSS !!

Thinking about how to install anything in BOSS GNU/Linux. .EXE files not working? Thinking how to run the .EXE? Don't worry, installing softwares, packages, themes, skins and other things are pretty easy in BOSS GNU/Linux. BOSS GNU/Linux provides you the ***Synaptic Manager*** which allows you to install anything in easy steps with good and easy understandable GUI. Initially have a look at the screen shots in this document, which will direct you in using synaptic in your system.

19.1 Synaptic Package Manager

Synaptic is a graphical package management program for apt. It provides the same features as the **apt-get** command line utility with a GUI front-end based on GTK+.

Features

- Install, remove, upgrade and downgrade single and multiple packages.
- Upgrade your whole system.
- Manage package repositories (sources.list).
- Find packages by name, description and several other attributes.
- Select packages by status, section, name or a custom filter.
- Sort packages by name, status, size or version.
- Browse all available online documentation related to a package.
- Download the latest changelog of a package.
- Lock packages to the current version.
- Force the installation of a specific package version.
- Undo/Redo of selections.
- Built-in terminal emulator for the package manager.
- Configure packages through the debconf system.

The synaptic, refers to the /etc/apt/sources.list file for the repository links and installs the softwares from those repositories. So, before installing anything check whether you have the correct entry in the sources.list file or not (by default these entries are present in the file). The BOSS repository links are:

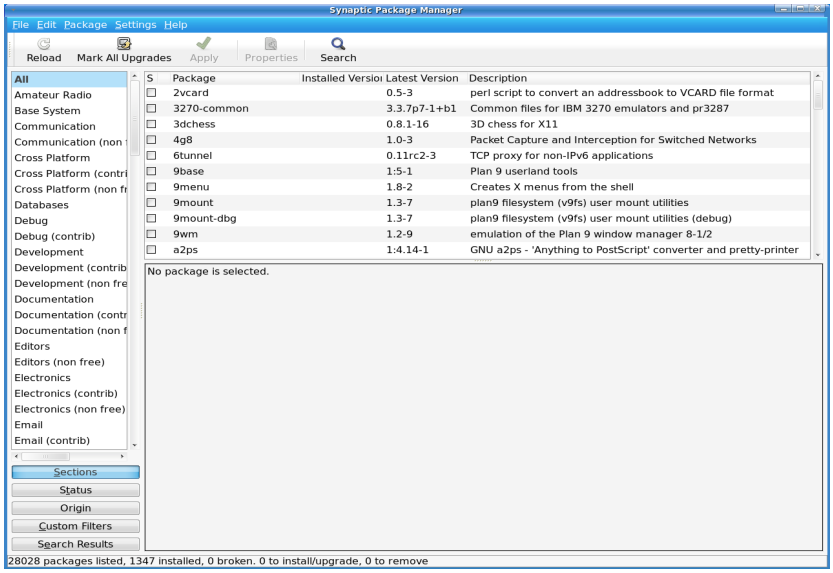
deb http://packages.bosslinux.in/boss BOSS main contrib non-free

deb-src http://packages.bosslinux.in/boss BOSS main contrib non-free *[to download source]*

You can edit this sources.list file manually and then open synaptic else, after you open the synaptic, you can enter the above paths through **Settings -> Repositories**.

To launch synaptic Package manager, go to **System -> Administration -> Synaptic Package Manager** or type **synaptic** in terminal and press *Enter.*

It opens the Synaptic Window:

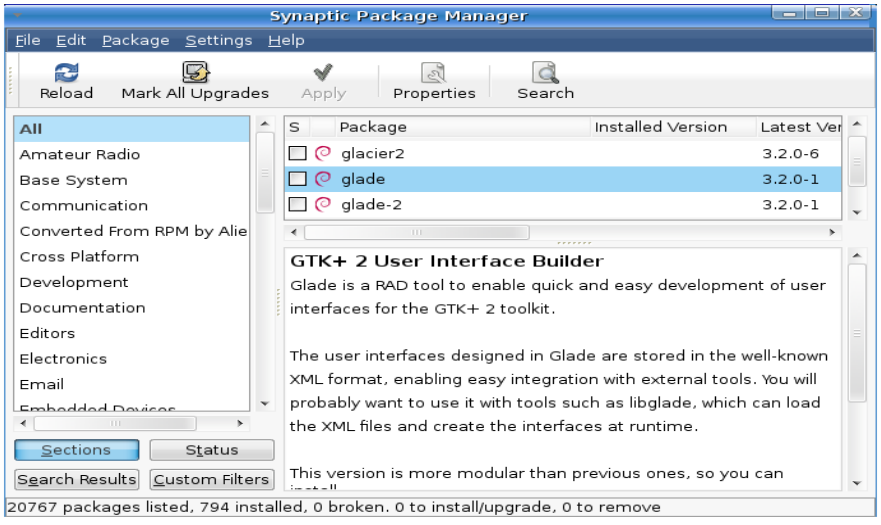

Synaptic Package Manager
File Edit Package Settings Help
Reload
Mark All Upgrades
Apply
Properties
Search
All
Amateur Radio
Base System
Communication
Cross Platform
Databases
Debug
Development
Documentation
Editors
Electronics
Email
Sections
Status
Origin
Custom Filters
Search Results
S Package Installed Version Latest Version Description
2vcard 0.5-3 perl script to convert an addressbook to VCARD file format
3270-common 3.3.7p7-1+b1 Common files for IBM 3270 emulators and pr3287
3dchess 0.8.1-16 3D chess for X11
4g8 1.0-3 Packet Capture and Interception for Switched Networks
6tunnel 0.11rc2-3 TCP proxy for non-IPv6 applications
9base 1:5-1 Plan 9 userland tools
9menu 1.8-2 Creates X menus from the shell
9mount 1.3-7 plan9 filesystem (v9fs) user mount utilities
9mount-dbg 1.3-7 plan9 filesystem (v9fs) user mount utilities (debug)
9wm 1.2-9 emulation of the Plan 9 window manager 8-1/2
a2ps 1:4.14-1 GNU a2ps - 'Anything to PostScript' converter and pretty-printer
No package is selected.
28028 packages listed, 1347 installed, 0 broken. 0 to install/upgrade, 0 to remove

By this time you might have already decided which package or software to install.

- Press *Ctrl+f* which opens the find window, where you can type the package name that you want to install.

Or

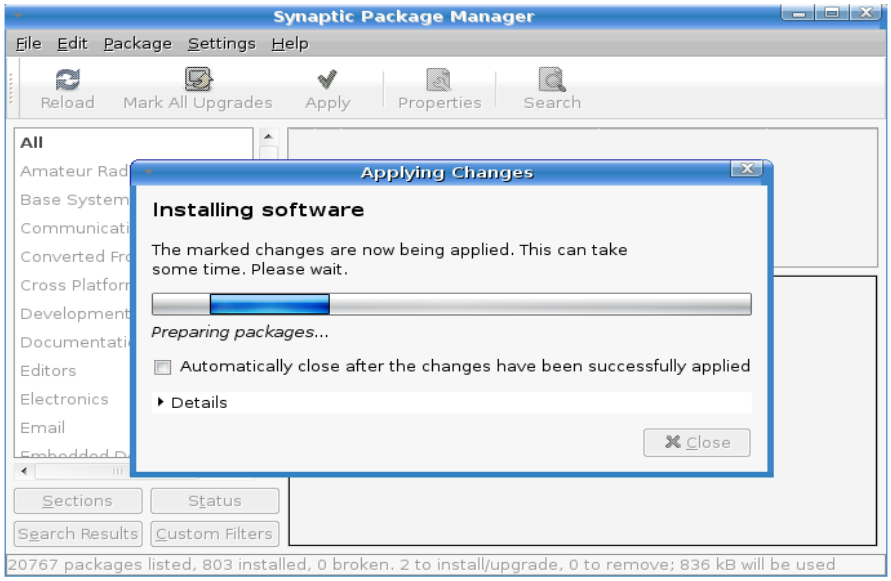
- Click on any of the package in the window and start typing the package name, which will let you see the packages with that name online (while typing). This opens the find window in the bottom right corner.

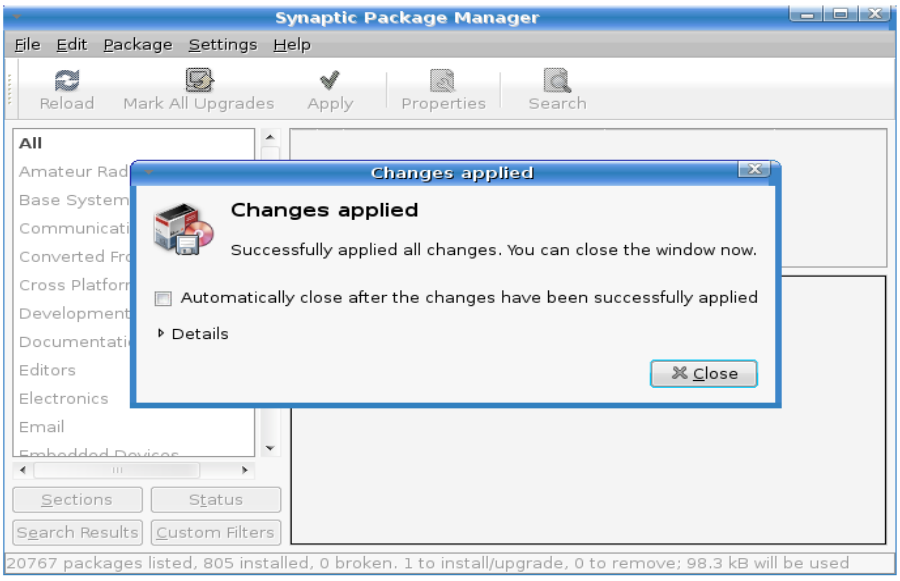

Synaptic Package Manager
File Edit Package Settings Help
Reload
Mark All Upgrades
Apply
Properties
Search
All
Amateur Radio
Base System
Communication
Converted From RPM by Alie
Cross Platform
Development
Documentation
Editors
Electronics
Email
Sections
Status
Search Results
Custom Filters
S Package Installed Version Latest Ver
glacier2 3.2.0-6
glade 3.2.0-1
glade-2 3.2.0-1
GTK+ 2 User Interface Builder
Glade is a RAD tool to enable quick and easy development of user interfaces for the GTK+ 2 toolkit.
The user interfaces designed in Glade are stored in the well-known XML format, enabling easy integration with external tools. You will probably want to use it with tools such as libglade, which can load the XML files and create the interfaces at runtime.
This version is more modular than previous ones, so you can
20767 packages listed, 794 installed, 0 broken. 0 to install/upgrade, 0 to remove

After you find your package in the synaptic, right click on the package name, and select “Mark for Installation”. This will mark the package for installation, in green color. If there are any

dependencies to install, it will show the dependent packages list in another window and their status like, whether it is safe to install or not, whether the dependent package removes any other package or installs any other packages, whether all the dependencies are available in the repository or not, etc. So, proceed further by checking the dependencies properly.

After you mark the package for installation, click on the “Apply” button in the top of the synaptic window. This starts the installation procedure.





Now your package is installed successfully. To uninstall any installed package, the same

procedure but instead of selecting the “Mark for Installation” select “Mark for Removal”. This will open a new window which will show you the list of packages (dependent) to be removed. Make sure that its not removing any base packages or needed packages.

Note: *If your are having a DHCP connection then no need to bother. But if you are using the static IP, then you need to enter the details about your proxy server in* ***Settings -> Preferences -> Network.***

19.2 Where is my Binary File ?

BOSS GNU/Linux uses Debian Package Management system. You might have been clear about this now. So for any new application you need to search for the debian binaries are .deb packages. You can initially check in the BOSS repository for the package.

1) Use Synaptic Package Manager to install the package in the above mentioned method.
2) Manually install from the command prompt if you know the exact package name.
3) So, if the package is in the boss-repository, then download the package manually into your system and use *dpkg -i <package.deb>*. This works fine only if there are no dependencies to that file. If you find any dependencies then you have to download all the files and install manually.

   [Better option is to use Synaptic Package Manager to install any software or package]

Install packages from Terminal

- Open the terminal **Applications -> Accessories -> Terminal.** Execute

  # vi /etc/apt/sources.list

- Add the following if they are not added previously

  http://packages.bosslinux.in/boss BOSS main contrib non-free

  Save the file by typing *Esc+:+wq*

- *Now in terminal type the following commands*

  #apt-get update

  #apt-get install <package name>

- If you are not finding the package in the repository then inform us at bosslinux@cdac.in.

20. About BOSS Live

The BOSS GNU/Linux Live project aims to create BOSS GNU/Linux Live CDs, DVDs, and USBs for the all the releases of BOSS GNU/Linux (and newer).

BOSS GNU/Linux Live is based on Debian GNU/Linux

This chapter is about BOSS GNU/Linux, a Free and Open Source Live Linux DVD. BOSS is a GNU/Linux distribution that boots and runs completely from DVD. It includes recent Linux software and desktop environments, with programs such as OpenOffice.org, Abiword, Gimp, Mozilla, Pidgin, XChat ,Totem, and hundreds of other quality open source programs. It also includes document converter, Presentation tool, bluetooth devices support and Input method for so many Indian Languages.

How to use BOSS GNU/Linux Live DVD

- Boot with BOSS GNU/Linux DVD and select **Start BOSS Live** and press *Enter*.
- BOSS GNU/Linux Live DVD boots and login with default user "boss".
- In order to access admin privileges use "sudo" before every command.

For example:: sudo mkdir temp

- Users and Passwords:

users	Passwords
boss	boss
root	root

- Use external storage device(Pen/USB devices) or mounted hard disk partitions for saving data.
- Remaining configurations and usage will be same as BOSS GNU/Linux Install section.

21. About Utility

It is a BOSS GNU/Linux Add on to install extra software over the BOSS GNU/Linux. It contains some of the workstation related packages which gives a brief focus on future releases. It contains

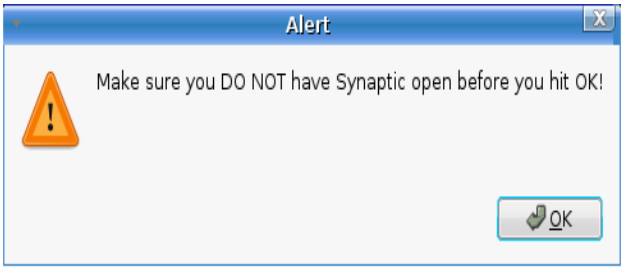
- Apache web server
- PHP scripting language
- Mysql database
- Postgresql
- eGroupware - collaboration tool
- Tamil and Hindi OT Fonts.
- Openoffice Languages packages
- Subversion

How to Use

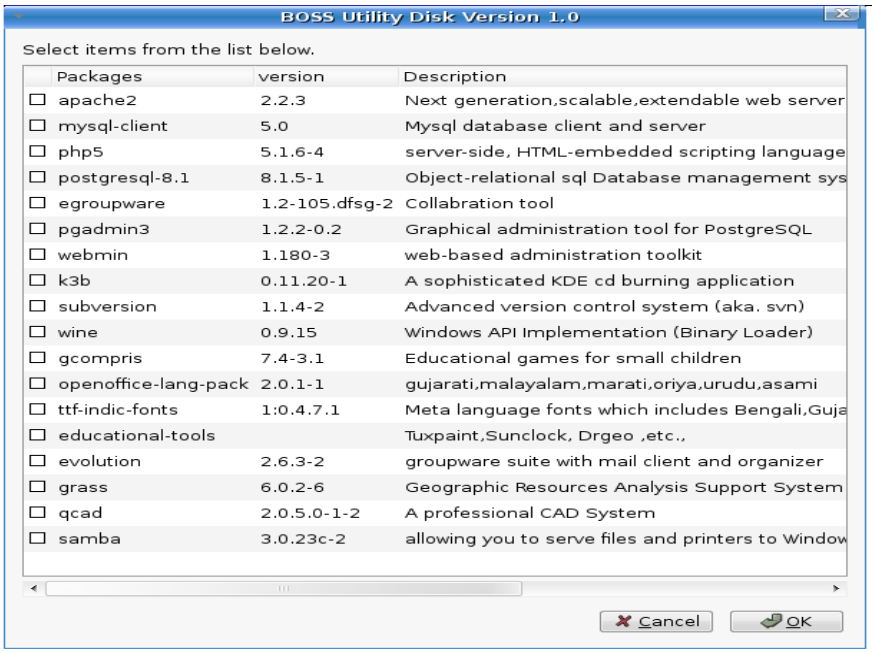
1. Choose **System -> Administration -> BOSS Utilities** or type **bossutilities** in terminal and press *Enter*.

   Now you can see a Welcome window on your desktop like this.

2. Next you will get a warning message about synaptic package manager. If synaptic manager is open then the installation won't continue. So close it before proceeding.



3. It will pop up with installation wizard,there you can select packages you want to install.



You can go through README file and doc folder on the Utility Disk for further assistance.

22. Troubleshooting BOSS GNU/Linux

If you face any kind of problems with BOSS GNU/Linux, please inform us so that we will help you in solving it. But there are some basic issues that the lay users can also troubleshoot their systems on their own. This section gives you brief introduction of some of the problems and the steps to solve those issues.

22.1 Forgotten User Password

Passwords are stored in encrypted files on your BOSS GNU/Linux system: users cannot read the file and see their own or other passwords. If you forget your user password, you must create a new one.

If you realize that you have forgotten your password while logged in, you can create a new one for yourself. Open a shell prompt and enter the command **passwd**. The **passwd** command asks for the new password, which you will have to enter twice. The next time you log in, use the new password.

If you are not logged in when you realize you have forgotten your password, log in as the root user. Open a shell prompt and enter the command $passwd <username> where <username> is your normal user name. The **passwd** command requires you to enter the new password twice. Log out of your system. You can now log back in with your normal user name and your new password.

22.2 Error Messages during installation of deb packages

While installing a deb package for any new application, you need to update the repository paths appropriately in the /etc/apt/sources.list file as explained in the previous chapter. When you execute the $apt-get update command at your shell prompt, if you see that the repositories are not connected, then there may be a problem of proxy settings. If you are using the DHCP connection then it may not create problem unless you are able to access internet well. But if you are using the internet through proxy server then you need to export the http_proxy parameter to your proxy server ip and port number. If you don't have any idea about your proxy server then contact your network administrator.

Example : $export http_proxy=http://192.168.31.100:3128

Now you will see that an update on your repositories will work well.

Installing certain packages:

For installing a particular package, you need to know the exact package name of the application. Use apt-get install <package name> to install a package if you know the exact package name. If you are not sure with the full name of the package then you can search the related packages in the repository by using the command apt-cache search <package name> where the <package name> is your assumed package name, and this name can also have the meta characters included for easy search, like php* gives all the versions of php like php-imap,php4-imap,php5-imap etc. Once you find the exact package name, install it using the command apt-get install <package name>.

22.3 Font Installation

Due to the change in gnome-vfs in the GNOME desktop environment.,fonts:/// folder is removed in latest GNOME.

Steps to install fonts in new GNOME Desktop environment

1. Open the folder which contains the font files.
2. Right click on the font you want to install, select the option **font viewer**
3. Click **Install font** option to install the font. This will create a **.fonts** folder under that particular user.
4. If the font to be put system wide ,then manually copy it to **/usr/share/fonts/true-type/<my-fonts>**

22.4 Grub Recovery

We are using grub2 the latest version of grub instead of grub-legacy and in this the recovery modes is also changed.
For a grub recovery ,boot through Live session . open terminal and run

"**grub-install /dev/hd0**"

this will install grub in MBR . for further refrence on grub2 recovery

If it is the first BIOS drive, this is the same as well:

```
# grub-install '(hd0)'
```

Or you can omit the parentheses:

```
# grub-install hd0
```

But all the above assume that GRUB should use images under the root directory. If you want GRUB to use images under a directory other than the root directory, you need to specify the option --root-directory. The typical usage is that you create a GRUB boot floppy with a filesystem.

```
# mke2fs /dev/fd0
# mount -t ext2 /dev/fd0 /mnt
# grub-install --root-directory=/mnt fd0
# umount /mnt
```

when you have a separate boot partition which is mounted at /boot. Since GRUB is a boot loader, it doesn't know anything about mount points at all. Thus, you need to run grub-install like this:

```
# grub-install --root-directory=/boot /dev/hda
```

Similarly the configuration files are also changed and put up with more security. Instead of a single menu.lst now the configuration files are divided and maintained separately.

Now **grub.cfg** will replace **menu.lst**.

Difference between grub2 to grub-legacy

- grub.cfg is typically automatically generated by grub-mkconfig.
- Partition numbers in GRUB device names now start at 1, not 0.
- The configuration file is now written in something closer to a full scripting language: variables, conditionals, and loops are available.
- A small amount of persistent storage is available across reboots, using the **save_env** and **load_env** commands in GRUB and the **grub-editenv** utility.
- GRUB 2 has more reliable ways to find its own files and those of target kernels on multiple-disk systems, and has commands to find devices using file system labels or Universally Unique Identifiers (UUIDs).
- GRUB 2 is available for several other types of system in addition to the PC BIOS systems supported by GRUB Legacy: PC EFI, PC coreboot, PowerPC, SPARC, and MIPS Lemote Yeeloong are all supported.
- Many more file systems are supported, including but not limited to ext4, HFS+, and NTFS.
- GRUB 2 can read files directly from LVM and RAID devices.
- A graphical terminal and a graphical menu system are available.
- GRUB 2's interface can be translated, including menu entry names.
- The image files that make up GRUB have been reorganized; Stage 1, Stage 1.5, and Stage 2 are no more.
- GRUB 2 puts many facilities in dynamically loaded modules, allowing the core image to be smaller, and allowing the core image to be built in more flexible ways.

23. Conclusion

The BOSS GNU/Linux project has given rise to an Indian distribution of GNU/Linux targeted at the primary and secondary school students. Inspite of the constraints on human resources, the team was able to build this Linux distribution in a relatively short time.

The project is ongoing and the next release of the software is currently being worked on. Further the repository for BOSS GNU/Linux will make it easier to build customized distros based on it as well as by application developers.

Choice of FOSS

Majority of government computer users require software for doing a number of common tasks like office applications (Word processor, spread sheet), accessing the Internet and multimedia in a secured environment. However, to bring it on every desk the software should be low cost and preferably no licensing fees at all. FOSS and GNU/Linux in particular meet all these requirements as it is free for use and can be freely copied, modified and distributed. It can also be easily localized to meet local needs and language. GNU/Linux is also relatively immune to common computer viruses, worms and spy ware.

23.1 About CDAC

Established in March 1988, as a Scientific Society of the Ministry of Communications and Information Technology, Government of India, C-DAC is primarily an R&D institution involved in the design, development and deployment of electronics and advanced Information Technology (IT) products and solutions.

C-DAC has established itself as premier R&D institution of National and International repute working in advanced areas of Electronics and Information Technology, developing and deploying IT products and solutions for diverse sectors of the economy.

23.2 About NRCFOSS

NRCFOSS has been promoted by the Department of Information Technology, MCIT, Government of India to address the issues related to FOSS in the Indian context and to explore how FOSS can play the twin roles of helping to bridge the digital divide as well as strengthening the Indian software industry.

One of the main objective of NRCFOSS is to come up with a local Indian GNU/Linux distribution viz. BOSS (Bharat Operating Systems Solutions). It was decided by a committee of experts to have an Indian distribution of Linux so that the language used for the desktop environment and some of the applications can be in the Indian language which will enable non-English literate users in the country to be exposed to ICT and to use the computer more

effectively. In the long term, the BOSS GNU/Linux project will attempt to be the standard GNU/Linux distribution for desktop computers in India.

23.3 Contact Us

To know more about us, you can visit the NRCFOSS portal at http://nrcfoss.org.in/ and further information about BOSS GNU/Linux and recent updates can be found at http://www.bosslinux.in. Also you can talk to the BOSS Team Members online through the irc channel *#BOSS-nrcfoss at Freenode.*

Centre for Development of Advanced Computing(C-DAC),

8th Floor, D South & North,

Tidel Park Ltd.,

No.4, Rajiv Gandhi Salai,

Taramani,

Chennai-600113

Ph: 91-44 - 2254 2226/27

Toll-Free No:1800 4250 455

Website: http://www.bosslinux.in

Email : bosslinux@cdac.in

23.4 BOSS Support Centres

Addresses of BOSS Support Centres in India

BOSS Support Centre

Centre for Development of Advanced Computing ,

Plot E-2/1, Block GP, Sector V,

Bindhanagar, Salt Lake,

Kolkata 700 091

Ph: 033 23573950

BOSS Support Centre

Centre for Development of Advanced Computing,

68,Electronics City,

Bangalore 560100

PH: 080 28523300

Email : bosslinux@ncb.ernet.in, bosslinux@cdacbangalore.in

BOSS Support Centre

Centre for Development of Advanced Computing ,

A-34, Phase 8, Industrial Area,

Mohali, Chandigarh 160 071

Punjab

Ph: 0172 2237054

BOSS Lab,C-DAC

6 CGO Complex

Electronics Niketan

Lodhi Road

New Delhi -110003

Ph: 011 - 24301313

Email: bosshelp@mit.gov.in

BOSS Support Centre

Centre for Development of Advanced Computing,

Anusandhan Bhawan, C-56/1,

Sector 62,

Noida 201 307

Uttar Pradesh

PH: 0120 – 3063344

BOSS Support Centre

Centre for Development of Advanced Computing ,

Vellayambalam,

Thirunananthapuram 695033

2Ph: 0471 – 2314412

BOSS Support Centre

Centre for Development of Advanced Computing ,

Campus of Pune University

Pune 411 007

Ph: 020 - 2564093

BOSS Support Centre

Centre for Development of Advanced Computing ,

2nd Floor, Delta Chambers,

Ameerpeth, Hyderabad 500 016

Ph: 040 - 231050115

BOSS Support Centre

Centre for Development of Advanced Computing ,

Gulmohar Cross Road No 9

Juhu, Mumbai 400 049

Ph: 022 - 26201488

Email: bosslinux.support@cdacmumbai.in

BOSS Support Centre

Centre for Development of Advanced Computing(C-DAC),

8th Floor, D South & North,

Tidel Park Ltd.,

No.4, Rajiv Gandhi Salai,

Taramani,

Chennai-600113

Ph: 91-44 - 2254 2226/27 Toll-Free No:1800 4250 455

Email : bosslinux@cdac.in